

DRAWING # X-111872-01

REPORT INDEX

Purchase Order: 2023016

Quantity: 200PCS

Shipment No.:

Shipment Date:

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METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2023.2.18
Drawing #:	X-111872-01	Specification:	API 6A/ASTM A370	API Monogram:	No
Report #:					SO-20230218-01
Part No.:		Material:	410 SS, Per NACE MR0175		Coating:
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3				Quantity:
					200

TEST CONDITION			
Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	570	Gauge Length:	200

CHEMICAL COMPOSITION												
Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
122V-2340			0.127	0.482	0.413	0.003	0.019	0.15	/	0.205	12.05	

MECHANICAL COMPOSITION										
Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY J(ft.lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2302015-01			570	680	24	66	224			

HEAT TREATMENT			
Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	720°C 6h AIR	Temper1:	720°C 6h AIR
Temper2:	680°C 6h AIR	Temper2:	680°C 6h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	50°C	End Temp.:	50°C

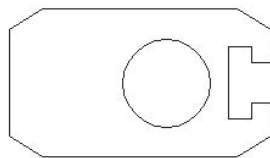
*We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.*

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2023.2.18
Drawing #:	X-111872-01	Specificati on:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20230218- 01
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC
Description	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU,PSL 3					Quantity:	200
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
1	SO23016-1-001	122V-2340	209	26	SO23016-1-026	122V-2340	217
2	SO23016-1-002	122V-2340	219	27	SO23016-1-027	122V-2340	228
3	SO23016-1-003	122V-2340	219	28	SO23016-1-028	122V-2340	214
4	SO23016-1-004	122V-2340	210	29	SO23016-1-029	122V-2340	216
5	SO23016-1-005	122V-2340	216	30	SO23016-1-030	122V-2340	219
6	SO23016-1-006	122V-2340	208	31	SO23016-1-031	122V-2340	213
7	SO23016-1-007	122V-2340	215	32	SO23016-1-032	122V-2340	219
8	SO23016-1-008	122V-2340	212	33	SO23016-1-033	122V-2340	215
9	SO23016-1-009	122V-2340	225	34	SO23016-1-034	122V-2340	218
10	SO23016-1-010	122V-2340	213	35	SO23016-1-035	122V-2340	214
11	SO23016-1-011	122V-2340	213	36	SO23016-1-036	122V-2340	211
12	SO23016-1-012	122V-2340	221	37	SO23016-1-037	122V-2340	216
13	SO23016-1-013	122V-2340	226	38	SO23016-1-038	122V-2340	219
14	SO23016-1-014	122V-2340	207	39	SO23016-1-039	122V-2340	214
15	SO23016-1-015	122V-2340	221	40	SO23016-1-040	122V-2340	209
16	SO23016-1-016	122V-2340	215	41	SO23016-1-041	122V-2340	217
17	SO23016-1-017	122V-2340	222	42	SO23016-1-042	122V-2340	228
18	SO23016-1-018	122V-2340	212	43	SO23016-1-043	122V-2340	214
19	SO23016-1-019	122V-2340	214	44	SO23016-1-044	122V-2340	216
20	SO23016-1-020	122V-2340	221	45	SO23016-1-045	122V-2340	222
21	SO23016-1-021	122V-2340	228	46	SO23016-1-046	122V-2340	218
22	SO23016-1-022	122V-2340	210	47	SO23016-1-047	122V-2340	215
23	SO23016-1-023	122V-2340	215	48	SO23016-1-048	122V-2340	212
24	SO23016-1-024	122V-2340	210	49	SO23016-1-049	122V-2340	212
25	SO23016-1-025	122V-2340	215	50	SO23016-1-050	122V-2340	207

Sketch:

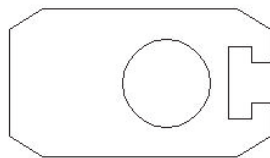


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:			Customer PO#:				Date:	2023.2.18
Drawing #:	X-111872-01	Specificati on:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20230218- 01	
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC	
Description	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU,PSL 3					Quantity:	200	
Item	S/N	Heat Log No.	Hardnes s	Item	S/N	Heat Log No.	Hardness	
51	SO23016-1-051	122V-2340	213	76	SO23016-1-076	122V-2340	218	
52	SO23016-1-052	122V-2340	224	77	SO23016-1-077	122V-2340	209	
53	SO23016-1-053	122V-2340	213	78	SO23016-1-078	122V-2340	219	
54	SO23016-1-054	122V-2340	227	79	SO23016-1-079	122V-2340	216	
55	SO23016-1-055	122V-2340	225	80	SO23016-1-080	122V-2340	208	
56	SO23016-1-056	122V-2340	219	81	SO23016-1-081	122V-2340	210	
57	SO23016-1-057	122V-2340	219	82	SO23016-1-082	122V-2340	209	
58	SO23016-1-058	122V-2340	225	83	SO23016-1-083	122V-2340	217	
59	SO23016-1-059	122V-2340	217	84	SO23016-1-084	122V-2340	219	
60	SO23016-1-060	122V-2340	216	85	SO23016-1-085	122V-2340	217	
61	SO23016-1-061	122V-2340	217	86	SO23016-1-086	122V-2340	208	
62	SO23016-1-062	122V-2340	216	87	SO23016-1-087	122V-2340	225	
63	SO23016-1-063	122V-2340	219	88	SO23016-1-088	122V-2340	218	
64	SO23016-1-064	122V-2340	209	89	SO23016-1-089	122V-2340	218	
65	SO23016-1-065	122V-2340	224	90	SO23016-1-090	122V-2340	221	
66	SO23016-1-066	122V-2340	224	91	SO23016-1-091	122V-2340	215	
67	SO23016-1-067	122V-2340	212	92	SO23016-1-092	122V-2340	229	
68	SO23016-1-068	122V-2340	219	93	SO23016-1-093	122V-2340	222	
69	SO23016-1-069	122V-2340	223	94	SO23016-1-094	122V-2340	217	
70	SO23016-1-070	122V-2340	225	95	SO23016-1-095	122V-2340	217	
71	SO23016-1-071	122V-2340	235	96	SO23016-1-096	122V-2340	217	
72	SO23016-1-072	122V-2340	216	97	SO23016-1-097	122V-2340	218	
73	SO23016-1-073	122V-2340	216	98	SO23016-1-098	122V-2340	224	
74	SO23016-1-074	122V-2340	208	99	SO23016-1-099	122V-2340	222	
75	SO23016-1-075	122V-2340	214	100	SO23016-1-100	122V-2340	212	

Sketch:

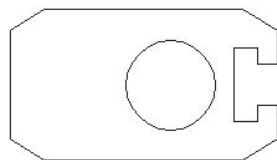


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:			Customer PO#:				Date:	2023.2.18
Drawing #:	X-111872-01	Specificati on:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20230218- 01	
Part No.:		Material:	410 SS,Per NACE MR0175				Coating:	TC
Description	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU,PSL 3					Quantity:	200	
Item	S/N	Heat Log No.	Hardnes s	Item	S/N	Heat Log No.	Hardness	
101	SO23016-1-101	122V-2340	209	126	SO23016-1-126	122V-2340	207	
102	SO23016-1-102	122V-2340	224	127	SO23016-1-127	122V-2340	216	
103	SO23016-1-103	122V-2340	216	128	SO23016-1-128	122V-2340	221	
104	SO23016-1-104	122V-2340	217	129	SO23016-1-129	122V-2340	216	
105	SO23016-1-105	122V-2340	216	130	SO23016-1-130	122V-2340	225	
106	SO23016-1-106	122V-2340	225	131	SO23016-1-131	122V-2340	228	
107	SO23016-1-107	122V-2340	224	132	SO23016-1-132	122V-2340	226	
108	SO23016-1-108	122V-2340	231	133	SO23016-1-133	122V-2340	212	
109	SO23016-1-109	122V-2340	216	134	SO23016-1-134	122V-2340	207	
110	SO23016-1-110	122V-2340	235	135	SO23016-1-135	122V-2340	215	
111	SO23016-1-111	122V-2340	222	136	SO23016-1-136	122V-2340	219	
112	SO23016-1-112	122V-2340	225	137	SO23016-1-137	122V-2340	218	
113	SO23016-1-113	122V-2340	207	138	SO23016-1-138	122V-2340	217	
114	SO23016-1-114	122V-2340	214	139	SO23016-1-139	122V-2340	218	
115	SO23016-1-115	122V-2340	219	140	SO23016-1-140	122V-2340	216	
116	SO23016-1-116	122V-2340	212	141	SO23016-1-141	122V-2340	222	
117	SO23016-1-117	122V-2340	225	142	SO23016-1-142	122V-2340	212	
118	SO23016-1-118	122V-2340	223	143	SO23016-1-143	122V-2340	215	
119	SO23016-1-119	122V-2340	217	144	SO23016-1-144	122V-2340	219	
120	SO23016-1-120	122V-2340	222	145	SO23016-1-145	122V-2340	235	
121	SO23016-1-121	122V-2340	225	146	SO23016-1-146	122V-2340	219	
122	SO23016-1-122	122V-2340	228	147	SO23016-1-147	122V-2340	228	
123	SO23016-1-123	122V-2340	224	148	SO23016-1-148	122V-2340	218	
124	SO23016-1-124	122V-2340	217	149	SO23016-1-149	122V-2340	216	
125	SO23016-1-125	122V-2340	216	150	SO23016-1-150	122V-2340	217	

Sketch:

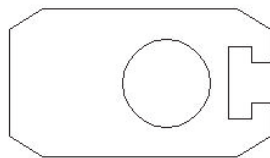


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	☒ Conforms	JI WEI	Min Fukang
	☐ Does Not Conform		

HARDNESS TEST REPORT

Customer:			Customer PO#:				Date:	2023.2.18
Drawing #:	X-111872-01	Specificati on:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20230218- 01	
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC	
Description	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU,PSL 3					Quantity:	200	
Item	S/N	Heat Log No.	Hardnes s	Item	S/N	Heat Log No.	Hardness	
151	SO23016-1-151	122V-2340	221	176	SO23016-1-176	122V-2340	224	
152	SO23016-1-152	122V-2340	224	177	SO23016-1-177	122V-2340	232	
153	SO23016-1-153	122V-2340	218	178	SO23016-1-178	122V-2340	207	
154	SO23016-1-154	122V-2340	213	179	SO23016-1-179	122V-2340	215	
155	SO23016-1-155	122V-2340	219	180	SO23016-1-180	122V-2340	223	
156	SO23016-1-156	122V-2340	218	181	SO23016-1-181	122V-2340	216	
157	SO23016-1-157	122V-2340	214	182	SO23016-1-182	122V-2340	215	
158	SO23016-1-158	122V-2340	218	183	SO23016-1-183	122V-2340	216	
159	SO23016-1-159	122V-2340	221	184	SO23016-1-184	122V-2340	217	
160	SO23016-1-160	122V-2340	208	185	SO23016-1-185	122V-2340	218	
161	SO23016-1-161	122V-2340	214	186	SO23016-1-186	122V-2340	225	
162	SO23016-1-162	122V-2340	217	187	SO23016-1-187	122V-2340	224	
163	SO23016-1-163	122V-2340	213	188	SO23016-1-188	122V-2340	215	
164	SO23016-1-164	122V-2340	212	189	SO23016-1-189	122V-2340	221	
165	SO23016-1-165	122V-2340	219	190	SO23016-1-190	122V-2340	217	
166	SO23016-1-166	122V-2340	228	191	SO23016-1-191	122V-2340	215	
167	SO23016-1-167	122V-2340	231	192	SO23016-1-192	122V-2340	216	
168	SO23016-1-168	122V-2340	234	193	SO23016-1-193	122V-2340	225	
169	SO23016-1-169	122V-2340	229	194	SO23016-1-194	122V-2340	215	
170	SO23016-1-170	122V-2340	228	195	SO23016-1-195	122V-2340	218	
171	SO23016-1-171	122V-2340	225	196	SO23016-1-196	122V-2340	219	
172	SO23016-1-172	122V-2340	225	197	SO23016-1-197	122V-2340	219	
173	SO23016-1-173	122V-2340	219	198	SO23016-1-198	122V-2340	218	
174	SO23016-1-174	122V-2340	211	199	SO23016-1-199	122V-2340	221	
175	SO23016-1-175	122V-2340	223	200	SO23016-1-200	122V-2340	212	

Sketch:

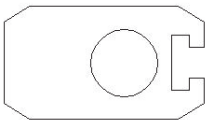


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2023.4.2
Drawing #:	X-111872-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2304-Q14	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After fine finishing			Inspected surface:	GATE (body)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	SO23016-1-001	122V-2340	209	26	SO23016-1-026	122V-2340	217	
2	SO23016-1-002	122V-2340	219	27	SO23016-1-027	122V-2340	228	
3	SO23016-1-003	122V-2340	219	28	SO23016-1-028	122V-2340	214	
4	SO23016-1-004	122V-2340	210	29	SO23016-1-029	122V-2340	216	
5	SO23016-1-005	122V-2340	216	30	SO23016-1-030	122V-2340	219	
6	SO23016-1-006	122V-2340	208	31	SO23016-1-031	122V-2340	213	
7	SO23016-1-007	122V-2340	215	32	SO23016-1-032	122V-2340	219	
8	SO23016-1-008	122V-2340	212	33	SO23016-1-033	122V-2340	215	
9	SO23016-1-009	122V-2340	225	34	SO23016-1-034	122V-2340	218	
10	SO23016-1-010	122V-2340	213	35	SO23016-1-035	122V-2340	214	
11	SO23016-1-011	122V-2340	213	36	SO23016-1-036	122V-2340	211	
12	SO23016-1-012	122V-2340	221	37	SO23016-1-037	122V-2340	216	
13	SO23016-1-013	122V-2340	226	38	SO23016-1-038	122V-2340	219	
14	SO23016-1-014	122V-2340	207	39	SO23016-1-039	122V-2340	214	
15	SO23016-1-015	122V-2340	221	40	SO23016-1-040	122V-2340	209	
16	SO23016-1-016	122V-2340	215	41	SO23016-1-041	122V-2340	217	
17	SO23016-1-017	122V-2340	222	42	SO23016-1-042	122V-2340	228	
18	SO23016-1-018	122V-2340	212	43	SO23016-1-043	122V-2340	214	
19	SO23016-1-019	122V-2340	214	44	SO23016-1-044	122V-2340	216	
20	SO23016-1-020	122V-2340	221	45	SO23016-1-045	122V-2340	222	
21	SO23016-1-021	122V-2340	228	46	SO23016-1-046	122V-2340	218	
22	SO23016-1-022	122V-2340	210	47	SO23016-1-047	122V-2340	215	
23	SO23016-1-023	122V-2340	215	48	SO23016-1-048	122V-2340	212	
24	SO23016-1-024	122V-2340	210	49	SO23016-1-049	122V-2340	212	
25	SO23016-1-025	122V-2340	215	50	SO23016-1-050	122V-2340	207	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

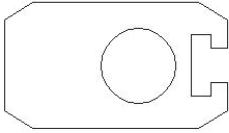
Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2023.4.2	

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2023.4.2
Drawing #:	X-111872-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2304-Q14	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After fine finishing			Inspected surface:	GATE (body)			

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO23016-1-051	122V-2340	213	76	SO23016-1-076	122V-2340	218
52	SO23016-1-052	122V-2340	224	77	SO23016-1-077	122V-2340	209
53	SO23016-1-053	122V-2340	213	78	SO23016-1-078	122V-2340	219
54	SO23016-1-054	122V-2340	227	79	SO23016-1-079	122V-2340	216
55	SO23016-1-055	122V-2340	225	80	SO23016-1-080	122V-2340	208
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58	SO23016-1-058	122V-2340	225	83	SO23016-1-083	122V-2340	217
59	SO23016-1-059	122V-2340	217	84	SO23016-1-084	122V-2340	219
60	SO23016-1-060	122V-2340	216	85	SO23016-1-085	122V-2340	217
61	SO23016-1-061	122V-2340	217	86	SO23016-1-086	122V-2340	208
62	SO23016-1-062	122V-2340	216	87	SO23016-1-087	122V-2340	225
63	SO23016-1-063	122V-2340	219	88	SO23016-1-088	122V-2340	218
64	SO23016-1-064	122V-2340	209	89	SO23016-1-089	122V-2340	218
65	SO23016-1-065	122V-2340	224	90	SO23016-1-090	122V-2340	221
66	SO23016-1-066	122V-2340	224	91	SO23016-1-091	122V-2340	215
67	SO23016-1-067	122V-2340	212	92	SO23016-1-092	122V-2340	229
68	SO23016-1-068	122V-2340	219	93	SO23016-1-093	122V-2340	222
69	SO23016-1-069	122V-2340	223	94	SO23016-1-094	122V-2340	217
70	SO23016-1-070	122V-2340	225	95	SO23016-1-095	122V-2340	217
71	SO23016-1-071	122V-2340	235	96	SO23016-1-096	122V-2340	217
72	SO23016-1-072	122V-2340	216	97	SO23016-1-097	122V-2340	218
73	SO23016-1-073	122V-2340	216	98	SO23016-1-098	122V-2340	224
74	SO23016-1-074	122V-2340	208	99	SO23016-1-099	122V-2340	222
75	SO23016-1-075	122V-2340	214	100	SO23016-1-100	122V-2340	212

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

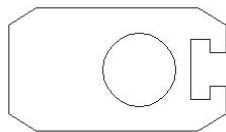
Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:	2023.4.2

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2023.4.2
Drawing #:	X-111872-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2304-Q14	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After fine finishing			Inspected surface:	GATE (body)			

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
101	SO23016-1-101	122V-2340	209	126	SO23016-1-126	122V-2340	207
102	SO23016-1-102	122V-2340	224	127	SO23016-1-127	122V-2340	216
103	SO23016-1-103	122V-2340	216	128	SO23016-1-128	122V-2340	221
104	SO23016-1-104	122V-2340	217	129	SO23016-1-129	122V-2340	216
105	SO23016-1-105	122V-2340	216	130	SO23016-1-130	122V-2340	225
106	SO23016-1-106	122V-2340	225	131	SO23016-1-131	122V-2340	228
107	SO23016-1-107	122V-2340	224	132	SO23016-1-132	122V-2340	226
108	SO23016-1-108	122V-2340	231	133	SO23016-1-133	122V-2340	212
109	SO23016-1-109	122V-2340	216	134	SO23016-1-134	122V-2340	207
110	SO23016-1-110	122V-2340	235	135	SO23016-1-135	122V-2340	215
111	SO23016-1-111	122V-2340	222	136	SO23016-1-136	122V-2340	219
112	SO23016-1-112	122V-2340	225	137	SO23016-1-137	122V-2340	218
113	SO23016-1-113	122V-2340	207	138	SO23016-1-138	122V-2340	217
114	SO23016-1-114	122V-2340	214	139	SO23016-1-139	122V-2340	218
115	SO23016-1-115	122V-2340	219	140	SO23016-1-140	122V-2340	216
116	SO23016-1-116	122V-2340	212	141	SO23016-1-141	122V-2340	222
117	SO23016-1-117	122V-2340	225	142	SO23016-1-142	122V-2340	212
118	SO23016-1-118	122V-2340	223	143	SO23016-1-143	122V-2340	215
119	SO23016-1-119	122V-2340	217	144	SO23016-1-144	122V-2340	219
120	SO23016-1-120	122V-2340	222	145	SO23016-1-145	122V-2340	235
121	SO23016-1-121	122V-2340	225	146	SO23016-1-146	122V-2340	219
122	SO23016-1-122	122V-2340	228	147	SO23016-1-147	122V-2340	228
123	SO23016-1-123	122V-2340	224	148	SO23016-1-148	122V-2340	218
124	SO23016-1-124	122V-2340	217	149	SO23016-1-149	122V-2340	216
125	SO23016-1-125	122V-2340	216	150	SO23016-1-150	122V-2340	217

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

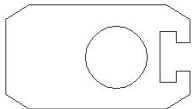
Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2023.4.2	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:	2023.4.2
Drawing #:	X-111872-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No
Report #:					NCS-2304-Q14
Part No.:		Material:	410 SS, Per NACE MR0175		Coating:
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3				Quantity:
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min
Stage:	After fine finishing		Inspected surface:	GATE (body)	

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
151	SO23016-1-151	122V-2340	221	176	SO23016-1-176	122V-2340	224
152	SO23016-1-152	122V-2340	224	177	SO23016-1-177	122V-2340	232
153	SO23016-1-153	122V-2340	218	178	SO23016-1-178	122V-2340	207
154	SO23016-1-154	122V-2340	213	179	SO23016-1-179	122V-2340	215
155	SO23016-1-155	122V-2340	219	180	SO23016-1-180	122V-2340	223
156	SO23016-1-156	122V-2340	218	181	SO23016-1-181	122V-2340	216
157	SO23016-1-157	122V-2340	214	182	SO23016-1-182	122V-2340	215
158	SO23016-1-158	122V-2340	218	183	SO23016-1-183	122V-2340	216
159	SO23016-1-159	122V-2340	221	184	SO23016-1-184	122V-2340	217
160	SO23016-1-160	122V-2340	208	185	SO23016-1-185	122V-2340	218
161	SO23016-1-161	122V-2340	214	186	SO23016-1-186	122V-2340	225
162	SO23016-1-162	122V-2340	217	187	SO23016-1-187	122V-2340	224
163	SO23016-1-163	122V-2340	213	188	SO23016-1-188	122V-2340	215
164	SO23016-1-164	122V-2340	212	189	SO23016-1-189	122V-2340	221
165	SO23016-1-165	122V-2340	219	190	SO23016-1-190	122V-2340	217
166	SO23016-1-166	122V-2340	228	191	SO23016-1-191	122V-2340	215
167	SO23016-1-167	122V-2340	231	192	SO23016-1-192	122V-2340	216
168	SO23016-1-168	122V-2340	234	193	SO23016-1-193	122V-2340	225
169	SO23016-1-169	122V-2340	229	194	SO23016-1-194	122V-2340	215
170	SO23016-1-170	122V-2340	228	195	SO23016-1-195	122V-2340	218
171	SO23016-1-171	122V-2340	225	196	SO23016-1-196	122V-2340	219
172	SO23016-1-172	122V-2340	225	197	SO23016-1-197	122V-2340	219
173	SO23016-1-173	122V-2340	219	198	SO23016-1-198	122V-2340	218
174	SO23016-1-174	122V-2340	211	199	SO23016-1-199	122V-2340	221
175	SO23016-1-175	122V-2340	223	200	SO23016-1-200	122V-2340	212

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:	2023.4.2

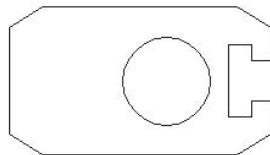
TUNGSTEN CARBIDE SPRAY REPORT

Customer:		Customer PO#:		Date:	2023.4.4
Drawing #:	X-111872-01	Specification :	API 6A	API Monogram:	No
Report #:	RS230404-01				
Part No.:		Material:	410 SS,Per NACE MR0175		Coating:
TC					Quantity:
Description: Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU,PSL 3					200
Dimension inspection					
ITEM	Hardness test		Bonding strength	Porosity	Coating type
Standard	≥1050		≥69MPa	MAX 1%	WC86-Co10-Cr4
Actual	1171		77	0.77	WC86-Co10-Cr4
Chemical component					
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)
standard	5.1-6.0	9.0-11.0	3.0-5.0		
Actual	5.40	9.70	3.89		
Evaluation & Disposition:			Found to be satisfactory		
Inspected by:			SHI LINGUI		
Approved by:			JI WEI		Date: 2023.4.4

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2023.4.6
Drawing #:	X-111872-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2304-H14	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After coating tungsten carbide			Inspected surface:	GATE (spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	SO23016-1-001	122V-2340	209	26	SO23016-1-026	122V-2340	217	
2	SO23016-1-002	122V-2340	219	27	SO23016-1-027	122V-2340	228	
3	SO23016-1-003	122V-2340	219	28	SO23016-1-028	122V-2340	214	
4	SO23016-1-004	122V-2340	210	29	SO23016-1-029	122V-2340	216	
5	SO23016-1-005	122V-2340	216	30	SO23016-1-030	122V-2340	219	
6	SO23016-1-006	122V-2340	208	31	SO23016-1-031	122V-2340	213	
7	SO23016-1-007	122V-2340	215	32	SO23016-1-032	122V-2340	219	
8	SO23016-1-008	122V-2340	212	33	SO23016-1-033	122V-2340	215	
9	SO23016-1-009	122V-2340	225	34	SO23016-1-034	122V-2340	218	
10	SO23016-1-010	122V-2340	213	35	SO23016-1-035	122V-2340	214	
11	SO23016-1-011	122V-2340	213	36	SO23016-1-036	122V-2340	211	
12	SO23016-1-012	122V-2340	221	37	SO23016-1-037	122V-2340	216	
13	SO23016-1-013	122V-2340	226	38	SO23016-1-038	122V-2340	219	
14	SO23016-1-014	122V-2340	207	39	SO23016-1-039	122V-2340	214	
15	SO23016-1-015	122V-2340	221	40	SO23016-1-040	122V-2340	209	
16	SO23016-1-016	122V-2340	215	41	SO23016-1-041	122V-2340	217	
17	SO23016-1-017	122V-2340	222	42	SO23016-1-042	122V-2340	228	
18	SO23016-1-018	122V-2340	212	43	SO23016-1-043	122V-2340	214	
19	SO23016-1-019	122V-2340	214	44	SO23016-1-044	122V-2340	216	
20	SO23016-1-020	122V-2340	221	45	SO23016-1-045	122V-2340	222	
21	SO23016-1-021	122V-2340	228	46	SO23016-1-046	122V-2340	218	
22	SO23016-1-022	122V-2340	210	47	SO23016-1-047	122V-2340	215	
23	SO23016-1-023	122V-2340	215	48	SO23016-1-048	122V-2340	212	
24	SO23016-1-024	122V-2340	210	49	SO23016-1-049	122V-2340	212	
25	SO23016-1-025	122V-2340	215	50	SO23016-1-050	122V-2340	207	

Sketch/Inspection Coverage:



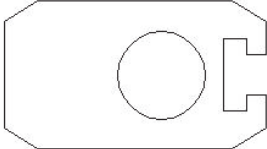
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2023.4.6	

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2023.4.6
Drawing #:	X-111872-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2304-H14	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3						Quantity:	200
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After coating tungsten carbide			Inspected surface:	GATE(spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
51	SO23016-1-051	122V-2340	213	76	SO23016-1-076	122V-2340	218	
52	SO23016-1-052	122V-2340	224	77	SO23016-1-077	122V-2340	209	
53	SO23016-1-053	122V-2340	213	78	SO23016-1-078	122V-2340	219	
54	SO23016-1-054	122V-2340	227	79	SO23016-1-079	122V-2340	216	
55	SO23016-1-055	122V-2340	225	80	SO23016-1-080	122V-2340	208	
56	SO23016-1-056	122V-2340	219	81	SO23016-1-081	122V-2340	210	
57	SO23016-1-057	122V-2340	219	82	SO23016-1-082	122V-2340	209	
58	SO23016-1-058	122V-2340	225	83	SO23016-1-083	122V-2340	217	
59	SO23016-1-059	122V-2340	217	84	SO23016-1-084	122V-2340	219	
60	SO23016-1-060	122V-2340	216	85	SO23016-1-085	122V-2340	217	
61	SO23016-1-061	122V-2340	217	86	SO23016-1-086	122V-2340	208	
62	SO23016-1-062	122V-2340	216	87	SO23016-1-087	122V-2340	225	
63	SO23016-1-063	122V-2340	219	88	SO23016-1-088	122V-2340	218	
64	SO23016-1-064	122V-2340	209	89	SO23016-1-089	122V-2340	218	
65	SO23016-1-065	122V-2340	224	90	SO23016-1-090	122V-2340	221	
66	SO23016-1-066	122V-2340	224	91	SO23016-1-091	122V-2340	215	
67	SO23016-1-067	122V-2340	212	92	SO23016-1-092	122V-2340	229	
68	SO23016-1-068	122V-2340	219	93	SO23016-1-093	122V-2340	222	
69	SO23016-1-069	122V-2340	223	94	SO23016-1-094	122V-2340	217	
70	SO23016-1-070	122V-2340	225	95	SO23016-1-095	122V-2340	217	
71	SO23016-1-071	122V-2340	235	96	SO23016-1-096	122V-2340	217	
72	SO23016-1-072	122V-2340	216	97	SO23016-1-097	122V-2340	218	
73	SO23016-1-073	122V-2340	216	98	SO23016-1-098	122V-2340	224	
74	SO23016-1-074	122V-2340	208	99	SO23016-1-099	122V-2340	222	
75	SO23016-1-075	122V-2340	214	100	SO23016-1-100	122V-2340	212	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

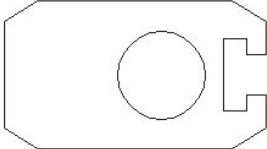
Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2023.4.6	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:	2023.4.6
Drawing #:	X-111872-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No
Report #:					NCS-2304-H14
Part No.:		Material:	410 SS, Per NACE MR0175		Coating:
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3				Quantity:
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min
Stage:	After coating tungsten carbide		Inspected surface:	GATE (spraying surface)	

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
101	SO23016-1-101	122V-2340	209	126	SO23016-1-126	122V-2340	207
102	SO23016-1-102	122V-2340	224	127	SO23016-1-127	122V-2340	216
103	SO23016-1-103	122V-2340	216	128	SO23016-1-128	122V-2340	221
104	SO23016-1-104	122V-2340	217	129	SO23016-1-129	122V-2340	216
105	SO23016-1-105	122V-2340	216	130	SO23016-1-130	122V-2340	225
106	SO23016-1-106	122V-2340	225	131	SO23016-1-131	122V-2340	228
107	SO23016-1-107	122V-2340	224	132	SO23016-1-132	122V-2340	226
108	SO23016-1-108	122V-2340	231	133	SO23016-1-133	122V-2340	212
109	SO23016-1-109	122V-2340	216	134	SO23016-1-134	122V-2340	207
110	SO23016-1-110	122V-2340	235	135	SO23016-1-135	122V-2340	215
111	SO23016-1-111	122V-2340	222	136	SO23016-1-136	122V-2340	219
112	SO23016-1-112	122V-2340	225	137	SO23016-1-137	122V-2340	218
113	SO23016-1-113	122V-2340	207	138	SO23016-1-138	122V-2340	217
114	SO23016-1-114	122V-2340	214	139	SO23016-1-139	122V-2340	218
115	SO23016-1-115	122V-2340	219	140	SO23016-1-140	122V-2340	216
116	SO23016-1-116	122V-2340	212	141	SO23016-1-141	122V-2340	222
117	SO23016-1-117	122V-2340	225	142	SO23016-1-142	122V-2340	212
118	SO23016-1-118	122V-2340	223	143	SO23016-1-143	122V-2340	215
119	SO23016-1-119	122V-2340	217	144	SO23016-1-144	122V-2340	219
120	SO23016-1-120	122V-2340	222	145	SO23016-1-145	122V-2340	235
121	SO23016-1-121	122V-2340	225	146	SO23016-1-146	122V-2340	219
122	SO23016-1-122	122V-2340	228	147	SO23016-1-147	122V-2340	228
123	SO23016-1-123	122V-2340	224	148	SO23016-1-148	122V-2340	218
124	SO23016-1-124	122V-2340	217	149	SO23016-1-149	122V-2340	216
125	SO23016-1-125	122V-2340	216	150	SO23016-1-150	122V-2340	217

Sketch/Inspection Coverage:



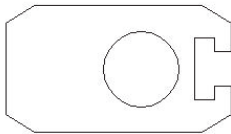
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:	2023.4.6

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2023.4.6
Drawing #:	X-111872-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2304-H14	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Gate, 4 1/16" 15M FLSR, 410 SS with TC, EE LU, PSL 3					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After coating tungsten carbide			Inspected surface:	GATE(spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
151	SO23016-1-151	122V-2340	221	176	SO23016-1-176	122V-2340	224	
152	SO23016-1-152	122V-2340	224	177	SO23016-1-177	122V-2340	232	
153	SO23016-1-153	122V-2340	218	178	SO23016-1-178	122V-2340	207	
154	SO23016-1-154	122V-2340	213	179	SO23016-1-179	122V-2340	215	
155	SO23016-1-155	122V-2340	219	180	SO23016-1-180	122V-2340	223	
156	SO23016-1-156	122V-2340	218	181	SO23016-1-181	122V-2340	216	
157	SO23016-1-157	122V-2340	214	182	SO23016-1-182	122V-2340	215	
158	SO23016-1-158	122V-2340	218	183	SO23016-1-183	122V-2340	216	
159	SO23016-1-159	122V-2340	221	184	SO23016-1-184	122V-2340	217	
160	SO23016-1-160	122V-2340	208	185	SO23016-1-185	122V-2340	218	
161	SO23016-1-161	122V-2340	214	186	SO23016-1-186	122V-2340	225	
162	SO23016-1-162	122V-2340	217	187	SO23016-1-187	122V-2340	224	
163	SO23016-1-163	122V-2340	213	188	SO23016-1-188	122V-2340	215	
164	SO23016-1-164	122V-2340	212	189	SO23016-1-189	122V-2340	221	
165	SO23016-1-165	122V-2340	219	190	SO23016-1-190	122V-2340	217	
166	SO23016-1-166	122V-2340	228	191	SO23016-1-191	122V-2340	215	
167	SO23016-1-167	122V-2340	231	192	SO23016-1-192	122V-2340	216	
168	SO23016-1-168	122V-2340	234	193	SO23016-1-193	122V-2340	225	
169	SO23016-1-169	122V-2340	229	194	SO23016-1-194	122V-2340	215	
170	SO23016-1-170	122V-2340	228	195	SO23016-1-195	122V-2340	218	
171	SO23016-1-171	122V-2340	225	196	SO23016-1-196	122V-2340	219	
172	SO23016-1-172	122V-2340	225	197	SO23016-1-197	122V-2340	219	
173	SO23016-1-173	122V-2340	219	198	SO23016-1-198	122V-2340	218	
174	SO23016-1-174	122V-2340	211	199	SO23016-1-199	122V-2340	221	
175	SO23016-1-175	122V-2340	223	200	SO23016-1-200	122V-2340	212	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Ji LIN	Approved by:	Ji WEI
Organization:	QC Department		
NDT Level:	II	Date: 2023.4.6	

DRAWING

REPORT INDEX

Purchase Order :	2023011
Quantity:	10PCS
Shipment No:	
Shipment Date :	2023 02 24

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (5 1/8"10M X-274064-1)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page – 3
2.2	Ultrasonic Testing	Page – 4
2.3	Magnetic Particle Inspection Report	Page – 5
2.4	Penetrant Flaw Detection Inspect	Page--6

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2023 02 24
Drawing #:	5 1/8 10M	Specification:	API Spec 6A/ASTM A370	API Monogram:	Y/N
Part No.:	X-274064-1	Material:	410 75K	Coating:	
Description:	STEM hydraulic. 5 .1/8" 10M 410SS,nitrided drawing 75K .PSL3 PR1 LU,				10

TEST CONDITION

Test Bar Size:	100mm*100mm*200mm	Bar Diameter:	Φ 55mm
\./././././.*			
Melt Practice:	RYR2302040	Reduction Ratio Min.:	38
Yield Stress:	555	Gauge Length:	50-75mm

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08						-		11.5	-
Spec. Max			0.15	1.00	1.00	0.030	0.035	1.00	-		13.5	
B320384 1	10		0.12	0.56	0.51	0.001	0.024	0.07			12.18	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY J(ft.lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	18.0	35.0	197	27J		
Spec. Max							235			
RYR2302 040	10		613	733	28	46	197-235			

HEAT TREATMENT

Forgings				Test Bar (QTC)			
Normalized:	1000°C	2h	Oil	Normalized:	1000°C	2h	Oil
Quench:	960°C	3h	Oil	Quench:	960°C	3.h	Oil
Temper1:	720°C	6h	Air	Temper1:	720°C	6h	Air
Temper2:	680°C	6h	Air	Temper2:	680°C	6h	Air
Start Temp.:	38°C			Start Temp.:	38°C		
End Temp.:	42°C			End Temp.:	42°C		

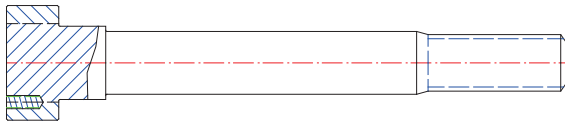
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.

Inspected By:	Wan Zhixiang	Approved By:	Zhu Yonglan

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2023 02 24
Drawing #:	5 1/8 10M	Specification:	API Spec 6A/ASTM E10	API Monogram:	Y/N	Report #:	
Part No.:	X-274064-1	Material:	410 75K			Coating:	
Description:	STEM hydraulic. 5 .1/8" 10M 410SS,nitrided drawing 75K .PSL3 PR1 LU,					Quantity:	10
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	RY23-001	RYR2302040	227				
2	RY23-002	RYR2302040	227				
3	RY23-003	RYR2302040	227				
4	RY23-004	RYR2302040	227				
5	RY23-005	RYR2302040	227				
6	RY23-006	RYR2302040	225				
7	RY23-007	RYR2302040	225				
8	RY23-008	RYR2302040	225				
9	RY23-009	RYR2302040	225				
10	RY23-010	RYR2302040	225				

Sketch:



Method Used:	HBW : D10 mm/ 3000kgf / 15s		
Acceptable Hardness:	197-235	Approved By:	Examined By:
Judgments:	[v] Conforms	Zhu Yonglan	Shen Yalin
	[] Does Not Conform		

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:				Date:	2023 02 24	
Drawing #:	5 1/8 10M	Specification:	API Spec 6A/ASTM A388		API Monogram:	Y/ N	Report #:		
Part No.:	X-274064-1	Material:	410 75K				Coating:		
Description:	STEM hydraulic. 5 .1/8" 10M 410SS,nitrided drawing 75K .PSL3 PR1 LU,					Quantity:	10		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	RY23-001	RYR2302040	Acceptable						
2	RY23-002	RYR2302040	Acceptable						
3	RY23-003	RYR2302040	Acceptable						
4	RY23-004	RYR2302040	Acceptable						
5	RY23-005	RYR2302040	Acceptable						
6	RY23-006	RYR2302040	Acceptable						
7	RY23-007	RYR2302040	Acceptable						
8	RY23-008	RYR2302040	Acceptable						
9	RY23-009	RYR2302040	Acceptable						
10	RY23-010	RYR2302040	Acceptable						

Sketch:



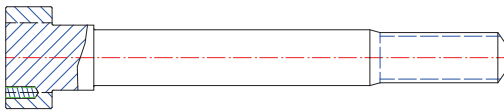
**ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:	ASME SECTION5	Technique:	Straight/Contact	Examined By:	Meng yi
Exam. Stage:	Rough After	Calibration:	Block:csk-I AACS-1-5	Level as per UT:	II
Equipment:	SUB110	Couplant:	Oil		
Probe Used:	2.5P $\varnothing$ 14	Acceptance Criteria:	API 6A PSL3 EE LU	Approved by:	Meng yi
I		Test Gain:	20db+4db	Level as per UT:	II
Nstrmt/Ident.#:					

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:			Date:	2023 02 24
Drawing #:	5 1/8 10M	Specification:	API Spec 6A/ASTM E709	API Monogram:	Y / N	Report #:		
Part No.:	X-274064-1	Material:	API Spec 6A/ASTM A370			Coating:		
Description:	STEM hydraulic. 5 .1/8" 10M 410SS,nitrided drawing 75K .PSL3 PR1 LU,					Quantity:	10	
Equipment:	CJW5000	Acceptance Criteria:	API 6A/PSL3		Circular AMPS:			
Test Method:		Particle Type:	WET Fluorescent		UV-Light Intensity:		1500 $\mu\text{W}/\text{CM}^2$	
Stage:		Concentration:	0.2		Magnetizing Time:			
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	RY23-001	RYR2302040	Acceptable					
2	RY23-002	RYR2302040	Acceptable					
3	RY23-003	RYR2302040	Acceptable					
4	RY23-004	RYR2302040	Acceptable					
5	RY23-005	RYR2302040	Acceptable					
6	RY23-006	RYR2302040	Acceptable					
7	RY23-007	RYR2302040	Acceptable					
8	RY23-008	RYR2302040	Acceptable					
9	RY23-009	RYR2302040	Acceptable					
10	RY23-010	RYR2302040	Acceptable					

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Wan Song	Organization:	QC Department
Approved by:++	Zhu Yonglan		
NDT Level:	II	Date:	2023 02 24

PENETRANT FLAW DETECTION INSPECT

Customer:			Customer PO#:			Date:	2023 02 24
Drawing #:	5 1/8 10M	Specification:	API Spec 6A/ASTM E709	API Monogram:	Y / N	Report #:	
Part No.:	X-274064-1	Material:	API Spec 6A/ASTM A370			Coating:	
Description:	STEM hydraulic. 5 .1/8" 10M 410SS,nitrided drawing 75K .PSL3 PR1 LU,					Quantity:	10
TYPE:	DPT-5	Acceptance Criteria:		API 6A/PSL3	FACE		GRINDING
Test Method:	ASTM E165	PENETRATION TIME		10min	DEVELOPE TIME		10min
Stage:		Concentration:		0.2	Magnetizing Time:		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	RY23-001	RYR2302040	Acceptable				
2	RY23-002	RYR2302040	Acceptable				
3	RY23-003	RYR2302040	Acceptable				
4	RY23-004	RYR2302040	Acceptable				
5	RY23-005	RYR2302040	Acceptable				
6	RY23-006	RYR2302040	Acceptable				
7	RY23-007	RYR2302040	Acceptable				
8	RY23-008	RYR2302040	Acceptable				
9	RY23-009	RYR2302040	Acceptable				
10	RY23-010	RYR2302040	Acceptable				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Wan Song	Organization:	QC Department
Approved by:	Zhu Yonglan		
NDT Level:	II	Date:	2023 02 24

DRAWING # X-111180-01

REPORT INDEX

Purchase Order: 2022194

Quantity: 100PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (X-111180-01)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 5
2.3	Tungsten carbide spray report	Page - 7
2.4	Penetrate testing report	Page - 8

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2022.10.13
Drawing #:	X-111180-01	Specification:	API 6A/ASTM A370	API Monogram:	No
Report #:	SO-20221013-01				
Part No.:		Material:	410 SS, Per NACE MR0175	Coating:	TC
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3				Quantity: 100

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	590	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
B3204858			0.14	0.52	0.31	0.001	0.023	0.41	/	/	11.85	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY J(ft.lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2210010-01			590	710	23	66	226			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	720°C 6h AIR	Temper1:	720°C 6h AIR
Temper2:	680°C 6h AIR	Temper2:	680°C 6h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

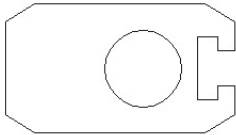
*We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.*

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.10.13	
Drawing #:	X-111180-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20221013-01
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3					Quantity:	100
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22194-1-001	B3204858	210	26	SO22194-1-026	B3204858	210
2	SO22194-1-002	B3204858	207	27	SO22194-1-027	B3204858	211
3	SO22194-1-003	B3204858	210	28	SO22194-1-028	B3204858	210
4	SO22194-1-004	B3204858	207	29	SO22194-1-029	B3204858	207
5	SO22194-1-005	B3204858	208	30	SO22194-1-030	B3204858	207
6	SO22194-1-006	B3204858	207	31	SO22194-1-031	B3204858	207
7	SO22194-1-007	B3204858	214	32	SO22194-1-032	B3204858	226
8	SO22194-1-008	B3204858	210	33	SO22194-1-033	B3204858	207
9	SO22194-1-009	B3204858	207	34	SO22194-1-034	B3204858	215
10	SO22194-1-010	B3204858	208	35	SO22194-1-035	B3204858	228
11	SO22194-1-011	B3204858	213	36	SO22194-1-036	B3204858	214
12	SO22194-1-012	B3204858	207	37	SO22194-1-037	B3204858	207
13	SO22194-1-013	B3204858	207	38	SO22194-1-038	B3204858	222
14	SO22194-1-014	B3204858	208	39	SO22194-1-039	B3204858	210
15	SO22194-1-015	B3204858	207	40	SO22194-1-040	B3204858	207
16	SO22194-1-016	B3204858	209	41	SO22194-1-041	B3204858	218
17	SO22194-1-017	B3204858	210	42	SO22194-1-042	B3204858	226
18	SO22194-1-018	B3204858	218	43	SO22194-1-043	B3204858	207
19	SO22194-1-019	B3204858	223	44	SO22194-1-044	B3204858	222
20	SO22194-1-020	B3204858	213	45	SO22194-1-045	B3204858	232
21	SO22194-1-021	B3204858	228	46	SO22194-1-046	B3204858	226
22	SO22194-1-022	B3204858	222	47	SO22194-1-047	B3204858	229
23	SO22194-1-023	B3204858	226	48	SO22194-1-048	B3204858	207
24	SO22194-1-024	B3204858	229	49	SO22194-1-049	B3204858	207
25	SO22194-1-025	B3204858	215	50	SO22194-1-050	B3204858	207

Sketch:

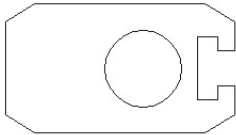


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	☒ Conforms	JI WEI	Min Fukang
	☐ Does Not Conform		

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.10.13	
Drawing #:	X-111180-01	Specifica tion:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20221013-01
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC
Description	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3					Quantity:	100
Item	S/N	Heat Log No.	Hardnes s	Item	S/N	Heat Log No.	Hardness
51	SO22194-1-051	B3204858	208	76	SO22194-1-076	B3204858	219
52	SO22194-1-052	B3204858	226	77	SO22194-1-077	B3204858	224
53	SO22194-1-053	B3204858	211	78	SO22194-1-078	B3204858	217
54	SO22194-1-054	B3204858	222	79	SO22194-1-079	B3204858	207
55	SO22194-1-055	B3204858	219	80	SO22194-1-080	B3204858	207
56	SO22194-1-056	B3204858	215	81	SO22194-1-081	B3204858	215
57	SO22194-1-057	B3204858	207	82	SO22194-1-082	B3204858	210
58	SO22194-1-058	B3204858	209	83	SO22194-1-083	B3204858	221
59	SO22194-1-059	B3204858	209	84	SO22194-1-084	B3204858	231
60	SO22194-1-060	B3204858	210	85	SO22194-1-085	B3204858	226
61	SO22194-1-061	B3204858	207	86	SO22194-1-086	B3204858	225
62	SO22194-1-062	B3204858	209	87	SO22194-1-087	B3204858	212
63	SO22194-1-063	B3204858	207	88	SO22194-1-088	B3204858	226
64	SO22194-1-064	B3204858	214	89	SO22194-1-089	B3204858	209
65	SO22194-1-065	B3204858	210	90	SO22194-1-090	B3204858	221
66	SO22194-1-066	B3204858	219	91	SO22194-1-091	B3204858	225
67	SO22194-1-067	B3204858	207	92	SO22194-1-092	B3204858	207
68	SO22194-1-068	B3204858	207	93	SO22194-1-093	B3204858	228
69	SO22194-1-069	B3204858	224	94	SO22194-1-094	B3204858	213
70	SO22194-1-070	B3204858	207	95	SO22194-1-095	B3204858	228
71	SO22194-1-071	B3204858	207	96	SO22194-1-096	B3204858	209
72	SO22194-1-072	B3204858	228	97	SO22194-1-097	B3204858	217
73	SO22194-1-073	B3204858	207	98	SO22194-1-098	B3204858	225
74	SO22194-1-074	B3204858	209	99	SO22194-1-099	B3204858	208
75	SO22194-1-075	B3204858	207	100	SO22194-1-100	B3204858	207

Sketch:



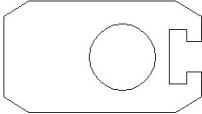
Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.10.22		
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2210-Q84		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3							Quantity:	100		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After fine finishing			Inspected surface:	GATE (body)						

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22194-1-001	B3204858	210	26	SO22194-1-026	B3204858	210
2	SO22194-1-002	B3204858	207	27	SO22194-1-027	B3204858	211
3	SO22194-1-003	B3204858	210	28	SO22194-1-028	B3204858	210
4	SO22194-1-004	B3204858	207	29	SO22194-1-029	B3204858	207
5	SO22194-1-005	B3204858	208	30	SO22194-1-030	B3204858	207
6	SO22194-1-006	B3204858	207	31	SO22194-1-031	B3204858	207
7	SO22194-1-007	B3204858	214	32	SO22194-1-032	B3204858	226
8	SO22194-1-008	B3204858	210	33	SO22194-1-033	B3204858	207
9	SO22194-1-009	B3204858	207	34	SO22194-1-034	B3204858	215
10	SO22194-1-010	B3204858	208	35	SO22194-1-035	B3204858	228
11	SO22194-1-011	B3204858	213	36	SO22194-1-036	B3204858	214
12	SO22194-1-012	B3204858	207	37	SO22194-1-037	B3204858	207
13	SO22194-1-013	B3204858	207	38	SO22194-1-038	B3204858	222
14	SO22194-1-014	B3204858	208	39	SO22194-1-039	B3204858	210
15	SO22194-1-015	B3204858	207	40	SO22194-1-040	B3204858	207
16	SO22194-1-016	B3204858	209	41	SO22194-1-041	B3204858	218
17	SO22194-1-017	B3204858	210	42	SO22194-1-042	B3204858	226
18	SO22194-1-018	B3204858	218	43	SO22194-1-043	B3204858	207
19	SO22194-1-019	B3204858	223	44	SO22194-1-044	B3204858	222
20	SO22194-1-020	B3204858	213	45	SO22194-1-045	B3204858	232
21	SO22194-1-021	B3204858	228	46	SO22194-1-046	B3204858	226
22	SO22194-1-022	B3204858	222	47	SO22194-1-047	B3204858	229
23	SO22194-1-023	B3204858	226	48	SO22194-1-048	B3204858	207
24	SO22194-1-024	B3204858	229	49	SO22194-1-049	B3204858	207
25	SO22194-1-025	B3204858	215	50	SO22194-1-050	B3204858	207

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

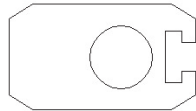
Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.10.22	

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.10.22		
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2210-Q84		
Part No.:			Material:	410 SS, Per NACE MR0175				Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3							Quantity:	100		
Equipment:	DPT-8		Acceptance Criteria:		API 6A/PSL3		Test Method:		DYE		
Penetrant Type:	Solvent		Penetration time:		15min		Developing time:		10min		
Stage:	After fine finishing				Inspected surface:		GATE (body)				

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22194-1-051	B3204858	208	76	SO22194-1-076	B3204858	219
52	SO22194-1-052	B3204858	226	77	SO22194-1-077	B3204858	224
53	SO22194-1-053	B3204858	211	78	SO22194-1-078	B3204858	217
54	SO22194-1-054	B3204858	222	79	SO22194-1-079	B3204858	207
55	SO22194-1-055	B3204858	219	80	SO22194-1-080	B3204858	207
56	SO22194-1-056	B3204858	215	81	SO22194-1-081	B3204858	215
57	SO22194-1-057	B3204858	207	82	SO22194-1-082	B3204858	210
58	SO22194-1-058	B3204858	209	83	SO22194-1-083	B3204858	221
59	SO22194-1-059	B3204858	209	84	SO22194-1-084	B3204858	231
60	SO22194-1-060	B3204858	210	85	SO22194-1-085	B3204858	226
61	SO22194-1-061	B3204858	207	86	SO22194-1-086	B3204858	225
62	SO22194-1-062	B3204858	209	87	SO22194-1-087	B3204858	212
63	SO22194-1-063	B3204858	207	88	SO22194-1-088	B3204858	226
64	SO22194-1-064	B3204858	214	89	SO22194-1-089	B3204858	209
65	SO22194-1-065	B3204858	210	90	SO22194-1-090	B3204858	221
66	SO22194-1-066	B3204858	219	91	SO22194-1-091	B3204858	225
67	SO22194-1-067	B3204858	207	92	SO22194-1-092	B3204858	207
68	SO22194-1-068	B3204858	207	93	SO22194-1-093	B3204858	228
69	SO22194-1-069	B3204858	224	94	SO22194-1-094	B3204858	213
70	SO22194-1-070	B3204858	207	95	SO22194-1-095	B3204858	228
71	SO22194-1-071	B3204858	207	96	SO22194-1-096	B3204858	209
72	SO22194-1-072	B3204858	228	97	SO22194-1-097	B3204858	217
73	SO22194-1-073	B3204858	207	98	SO22194-1-098	B3204858	225
74	SO22194-1-074	B3204858	209	99	SO22194-1-099	B3204858	208
75	SO22194-1-075	B3204858	207	100	SO22194-1-100	B3204858	207

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization :	QC Department		
NDT Level:	II	Date: 2022.10.22	

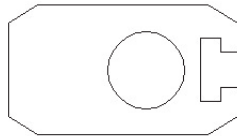
TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.10.24	
Drawing #:	X-111180-01	Specification :	API 6A		API Monogram:	No	Report #:	RS221024-01		
Part No.:		Material:	410 SS,Per NACE MR0175				Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3						Quantity:	100		
Dimension inspection										
ITEM	Hardness test		Bonding strength		Porosity		Coating type			
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4			
Actual	1171		77		0.77		WC86-Co10-Cr4			
Chemical component										
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)					
standard	5.1-6.0	9.0-11.0	3.0-5.0							
Actual	5.40	9.70	3.89							
Evaluation & Disposition:			Found to be satisfactory							
Inspected by:			SHI LINGUI							
Approved by:			JI WEI				Date:	2022.10.24		

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.10.26
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2210-H84	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3					Quantity:	100	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After coating tungsten carbide			Inspected surface:	GATE (spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	SO22194-1-001	B3204858	210	26	SO22194-1-026	B3204858	210	
2	SO22194-1-002	B3204858	207	27	SO22194-1-027	B3204858	211	
3	SO22194-1-003	B3204858	210	28	SO22194-1-028	B3204858	210	
4	SO22194-1-004	B3204858	207	29	SO22194-1-029	B3204858	207	
5	SO22194-1-005	B3204858	208	30	SO22194-1-030	B3204858	207	
6	SO22194-1-006	B3204858	207	31	SO22194-1-031	B3204858	207	
7	SO22194-1-007	B3204858	214	32	SO22194-1-032	B3204858	226	
8	SO22194-1-008	B3204858	210	33	SO22194-1-033	B3204858	207	
9	SO22194-1-009	B3204858	207	34	SO22194-1-034	B3204858	215	
10	SO22194-1-010	B3204858	208	35	SO22194-1-035	B3204858	228	
11	SO22194-1-011	B3204858	213	36	SO22194-1-036	B3204858	214	
12	SO22194-1-012	B3204858	207	37	SO22194-1-037	B3204858	207	
13	SO22194-1-013	B3204858	207	38	SO22194-1-038	B3204858	222	
14	SO22194-1-014	B3204858	208	39	SO22194-1-039	B3204858	210	
15	SO22194-1-015	B3204858	207	40	SO22194-1-040	B3204858	207	
16	SO22194-1-016	B3204858	209	41	SO22194-1-041	B3204858	218	
17	SO22194-1-017	B3204858	210	42	SO22194-1-042	B3204858	226	
18	SO22194-1-018	B3204858	218	43	SO22194-1-043	B3204858	207	
19	SO22194-1-019	B3204858	223	44	SO22194-1-044	B3204858	222	
20	SO22194-1-020	B3204858	213	45	SO22194-1-045	B3204858	232	
21	SO22194-1-021	B3204858	228	46	SO22194-1-046	B3204858	226	
22	SO22194-1-022	B3204858	222	47	SO22194-1-047	B3204858	229	
23	SO22194-1-023	B3204858	226	48	SO22194-1-048	B3204858	207	
24	SO22194-1-024	B3204858	229	49	SO22194-1-049	B3204858	207	
25	SO22194-1-025	B3204858	215	50	SO22194-1-050	B3204858	207	

Sketch/Inspection Coverage:



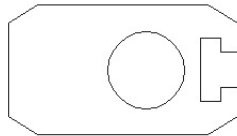
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.10.26	

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.10.26		
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No			Report #:	NCS-2210-H84		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3							Quantity:	100		
Equipment:	DPT-8		Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE		
Penetrant Type:	Solvent		Penetration time:		15min	Developing time:			10min		
Stage:	After coating tungsten carbide				Inspected surface:	GATE(spraying surface)					
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
51	SO22194-1-051	B3204858	208	76	SO22194-1-076	B3204858	219				
52	SO22194-1-052	B3204858	226	77	SO22194-1-077	B3204858	224				
53	SO22194-1-053	B3204858	211	78	SO22194-1-078	B3204858	217				
54	SO22194-1-054	B3204858	222	79	SO22194-1-079	B3204858	207				
55	SO22194-1-055	B3204858	219	80	SO22194-1-080	B3204858	207				
56	SO22194-1-056	B3204858	215	81	SO22194-1-081	B3204858	215				
57	SO22194-1-057	B3204858	207	82	SO22194-1-082	B3204858	210				
58	SO22194-1-058	B3204858	209	83	SO22194-1-083	B3204858	221				
59	SO22194-1-059	B3204858	209	84	SO22194-1-084	B3204858	231				
60	SO22194-1-060	B3204858	210	85	SO22194-1-085	B3204858	226				
61	SO22194-1-061	B3204858	207	86	SO22194-1-086	B3204858	225				
62	SO22194-1-062	B3204858	209	87	SO22194-1-087	B3204858	212				
63	SO22194-1-063	B3204858	207	88	SO22194-1-088	B3204858	226				
64	SO22194-1-064	B3204858	214	89	SO22194-1-089	B3204858	209				
65	SO22194-1-065	B3204858	210	90	SO22194-1-090	B3204858	221				
66	SO22194-1-066	B3204858	219	91	SO22194-1-091	B3204858	225				
67	SO22194-1-067	B3204858	207	92	SO22194-1-092	B3204858	207				
68	SO22194-1-068	B3204858	207	93	SO22194-1-093	B3204858	228				
69	SO22194-1-069	B3204858	224	94	SO22194-1-094	B3204858	213				
70	SO22194-1-070	B3204858	207	95	SO22194-1-095	B3204858	228				
71	SO22194-1-071	B3204858	207	96	SO22194-1-096	B3204858	209				
72	SO22194-1-072	B3204858	228	97	SO22194-1-097	B3204858	217				
73	SO22194-1-073	B3204858	207	98	SO22194-1-098	B3204858	225				
74	SO22194-1-074	B3204858	209	99	SO22194-1-099	B3204858	208				
75	SO22194-1-075	B3204858	207	100	SO22194-1-100	B3204858	207				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.10.26	

DRAWING

REPORT INDEX

Purchase Order :	2022205
Quantity:	50PC
Shipment No:	
Shipment Date :	2022 11 18

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (4-1/16"-15M B04-351)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page – 3
2.2	Ultrasonic Testing	Page – 4-5
2.3	Magnetic Particle Inspection Report	Page -6-7
2.4	PENETRANT FLAW DETECTION INSPECT	Page -8-9

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2022 10 12
Drawing #:	4 1/16-15M	Specification:	API Spec 6A	API Monogram:	Y/N
Part No.:	B04-351	Material:	UNS S17400/17-4PH	Coating:	
Description:	Stem, 4 1/16" 15M Manual FLSR 17-4SS. WITH BLOCK INSTALLED WITH PIN EE LU PSL				Quantity: 50

TEST CONDITION

Test Bar Size:	100mm*100mm*200mm	Bar Diameter:	Φ 55mm
Melt Practice:	RYR-10-014	Reduction Ratio Min.:	56
Yield Stress:	820	Gauge Length:	55-75mm

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	Nb
Spec. Min								3.00	3.00		15.00	-
Spec. Max			0.070	1.00	1.00	0.03	0.04	5.00	5.00		17.00	
YX2208-2019	50		0.026	0.47	0.40	0.002	0.027	4.15	3.64		15.60	0.244

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HRC	10mm x 10mm CHARPY J(ft.lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			725	930	16	50	28			
Spec. Max							33			
RYR-10-014	50		806	1075	22.5	70	29-33			

HEAT TREATMENT

Herm	Solid melting	Normalize	Precipitation	Precipitation
Furnace temperature	200°C	--	240°C	140°C
Heating up Rate	With the stove	--	With the stove	With the stove
Holding Temperature	1040°C	--	630°C	630°C
Holding Time	4.5H	--	6H	6H
Cooling down Rate	--	--	--	--
Out of furnace at	1040°C	--	630°C	630°C
Cooling Media	Water cooling	--	Air cooling	Air cooling

*We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.*

Inspected By:	Tao GuoMing	Approved By:	Chen Jun

HARDNESS TEST REPORT

Customer r:			Customer PO#:				Date:	2022 10 12	
Drawing #:	4 1/16-15M	Specification:	API Spec 6A		API Monogram:	Y / N	Report #:		
Part No.:	B04-351	Material:	UNS S17400/17-4PH					Coating:	
Description:	Stem,4 1/16" 15M Manual FLSR 17-4SS.WITH BLOCK INSTALLED WITH PIN EE LU PSL						Quantity:	40	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.		Hardness	
1	RY22-0001	RYR-10-014	31	21	RY22-0021	RYR-10-014		32	
2	RY22-0002	RYR-10-014	31	22	RY22-0022	RYR-10-014		32	
3	RY22-0003	RYR-10-014	31	23	RY22-0023	RYR-10-014		31	
4	RY22-0004	RYR-10-014	30	24	RY22-0024	RYR-10-014		30	
5	RY22-0005	RYR-10-014	30	25	RY22-0025	RYR-10-014		30	
6	RY22-0006	RYR-10-014	29	26	RY22-0026	RYR-10-014		29	
7	RY22-0007	RYR-10-014	29	27	RY22-0027	RYR-10-014		29	
8	RY22-0008	RYR-10-014	31	28	RY22-0028	RYR-10-014		30	
9	RY22-0009	RYR-10-014	32	29	RY22-0399	RYR-10-014		30	
10	RY22-0010	RYR-10-014	32	30	RY22-0030	RYR-10-014		31	
11	RY22-0011	RYR-10-014	31	31	RY22-0031	RYR-10-014		29	
12	RY22-0012	RYR-10-014	31	32	RY22-0032	RYR-10-014		30	
13	RY22-0013	RYR-10-014	30	33	RY22-0033	RYR-10-014		31	
14	RY22-0014	RYR-10-014	30	34	RY22-0034	RYR-10-014		31	
15	RY22-0015	RYR-10-014	30	35	RY22-0035	RYR-10-014		32	
16	RY22-0016	RYR-10-014	32	36	RY22-0036	RYR-10-014		32	
17	RY22-0017	RYR-10-014	32	37	RY22-0037	RYR-10-014		31	
18	RY22-0018	RYR-10-014	31	38	RY22-0038	RYR-10-014		30	
19	RY22-0019	RYR-10-014	31	39	RY22-0039	RYR-10-014		30	
20	RY22-0020	RYR-10-014	31	40	RY22-0040	RYR-10-014		29	



Method Used:			
Acceptable Hardness HRC	28-33	Approved By:	Examined By:
Judgments:	[v] Conforms	Tao GuoMing	Chen Jun
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022 10 12	
Drawing #:	4 1/16-15M	Specification:	API Spec 6A		API Monogram:	Y / N	Report #:		
Part No.:	B04-351	Material:	UNS S17400/17-4PH				Coating:		
Description:	Stem, 4 1/16" 15M Manual FLSR 17-4SS. WITH BLOCK INSTALLED WITH PIN EE LU PSL						Quantity:	40	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness		
41	RY22-0371	RYR-10-014	29						
42	RY22-0372	RYR-10-014	31						
43	RY22-0373	RYR-10-014	31						
44	RY22-0374	RYR-10-014	32						
45	RY22-0375	RYR-10-014	32						
46	RY22-0376	RYR-10-014	30						
47	RY22-0377	RYR-10-014	30						
48	RY22-0378	RYR-10-014	29						
49	RY22-0379	RYR-10-014	30						
50	RY22-0380	RYR-10-014	31						



Method Used:			
Acceptable Hardness HRC	28-33	Approved By:	Examined By:
Judgments:	[v] Conforms	Tao GuoMing	Chen Jun
	[] Does Not Conform		

ULTRASONIC EXAMINATION REPORT

Custo			Customer PO#:				Date:	2022 10 12	
Drawin g #:	4 1/16-15M	Specification:	API Spec 6A		API Monogram:		Y / N	Report #:	
Part No.:	B04-351	Material:	UNS S17400/17-4PH					Coating:	
Descri ption:	Stem,4 1/16" 15M Manual FLSR 17-4SS.WITH BLOCK INSTALLED WITH PIN EE LU PSL						Quantity:		40
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.		Hardness	
1	RY22-0001	RYR-10-014	Acceptable	17	RY22-0017	RYR-10-014		Acceptable	
2	RY22-0002	RYR-10-014	Acceptable	18	RY22-0018	RYR-10-014		Acceptable	
3	RY22-0003	RYR-10-014	Acceptable	19	RY22-0019	RYR-10-014		Acceptable	
4	RY22-0004	RYR-10-014	Acceptable	20	RY22-0020	RYR-10-014		Acceptable	
5	RY22-03005	RYR-10-014	Acceptable	21	RY22-0021	RYR-10-014		Acceptable	
6	RY22-0006	RYR-10-014	Acceptable	22	RY22-0022	RYR-10-014		Acceptable	
7	RY22-0007	RYR-10-014	Acceptable	23	RY22-0023	RYR-10-014		Acceptable	
8	RY22-0008	RYR-10-014	Acceptable	24	RY22-0024	RYR-10-014		Acceptable	
9	RY22-0009	RYR-10-014	Acceptable	25	RY22-0025	RYR-10-014		Acceptable	
10	RY22-0010	RYR-10-014	Acceptable	26	RY22-0026	RYR-10-014		Acceptable	
11	RY22-0011	RYR-10-014	Acceptable	27	RY22-0027	RYR-10-014		Acceptable	
12	RY22-0012	RYR-10-014	Acceptable	28	RY22-0028	RYR-10-014		Acceptable	
13	RY22-0013	RYR-10-014	Acceptable	29	RY22-0029	RYR-10-014		Acceptable	
14	RY22-0014	RYR-10-014	Acceptable	30	RY22-0030	RYR-10-014		Acceptable	
15	RY22-0015	RYR-10-014	Acceptable	31	RY22-0031	RYR-10-014		Acceptable	
16	RY22-0016	RYR-10-014	Acceptable	32	RY22-0032	RYR-10-014		Acceptable	

Sketch:



**ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:	ASME SECTION5	Technique:	Straight/Contact	Examined By:	Tao GuoMing
Exam. Stage:	After Heat treatment	Calibration:	Block:csk-I AACS-1-5	Level as per UT:	II
Equipment:	CTS-2020	Couplant :	Engine Oil		
Probe Used:	2.5P145p14F3 0	Acceptance Criteria:	API 6A PSL3 EE LU/ASME SA745	Approved by:	Chen Jun
Instrmt/Ident.#:		Test Gain:	Φ 3.0MM+6dB	Level as per UT:	II

ULTRASONIC EXAMINATION REPORT

Custo				Customer PO#:				Date:	2022 10 12	
Drawin g #:	4 1/16-15M	Specification:	API Spec 6A		API Monogram:	Y / N		Report #:		
Part No.:	B04-351	Material:	UNS S17400/17-4PH				Coating:			
Descri ption:	Stem, 4 1/16" 15M Manual FLSR 17-4SS. WITH BLOCK INSTALLED WITH PIN EE LU PSL						Quantity:	40		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness			
33	RY22-0033	RYP-10-014	Acceptable	47	RY22-0047	RYP-10-014	Acceptable			
34	RY22-0034	RYP-10-014	Acceptable	48	RY22-0048	RYP-10-014	Acceptable			
35	RY22-0035	RYP-10-014	Acceptable	49	RY22-0049	RYP-10-014	Acceptable			
36	RY22-0036	RYP-10-014	Acceptable	50	RY22-0050	RYP-10-014	Acceptable			
37	RY22-0037	RYP-10-014	Acceptable							
38	RY22-0038	RYP-10-014	Acceptable							
39	RY22-0039	RYP-10-014	Acceptable							
40	RY22-0040	RYP-10-014	Acceptable							
41	RY22-0041	RYP-10-014	Acceptable							
42	RY22-0042	RYP-10-014	Acceptable							
43	RY22-0043	RYP-10-014	Acceptable							
44	RY22-0044	RYP-10-014	Acceptable							
45	RY22-0045	RYP-10-014	Acceptable							
46	RY22-0046	RYP-10-014	Acceptable							

Sketch:



****ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.**

UT Code:	ASME SECTION5	Technique:	Straight/Contact	Examined By:	Tao GuoMing
Exam. Stage:	After Heat treatment	Calibration:	Block:csk-I AACS-1-5	Level as per UT:	II
Equipment:	CTS-2020	Couplant :	Engine Oil		
Probe Used:	2.5P145p14F3 0	Acceptance Criteria:	API 6A PSL3 EE LU/ASME SA745	Approved by:	Chen Jun
Instrmt/Ident.#:		Test Gain:	Φ 3.0MM+6dB	Level as per UT:	II

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:				Date:	2022 10 12		
Drawing #:	4 1/16-15M	Specification:	API Spec 6A		API Monogram:	Y / N	Report #:				
Part No.:	B04-351	Material:	UNS S17400/17-4PH				Coating:				
Description:	Stem, 4 1/16" 15M Manual FLSR 17-4SS. WITH BLOCK INSTALLED WITH PIN EE LU PSL							40			
Equipment:	CJW5000	Acceptance Criteria:			API 6A/P SL3	Circular AMPS:					
Test Method:		Particle Type:			WET Fluorescent	UV-Light Intensity:			1500 $\mu\text{W}/\text{CM}^2$		
Stage:		Concentration:			0.2	Magnetizing Time:					
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	RY22-0001	RYR-10-014	Acceptable	17	RY22-0017	RYR-10-014	Acceptable				
2	RY22-0002	RYR-10-014	Acceptable	18	RY22-0018	RYR-10-014	Acceptable				
3	RY22-0003	RYR-10-014	Acceptable	19	RY22-0019	RYR-10-014	Acceptable				
4	RY22-0004	RYR-10-014	Acceptable	20	RY22-0020	RYR-10-014	Acceptable				
5	RY22-0005	RYR-10-014	Acceptable	21	RY22-0021	RYR-10-014	Acceptable				
6	RY22-0006	RYR-10-014	Acceptable	22	RY22-0022	RYR-10-014	Acceptable				
7	RY22-0007	RYR-10-014	Acceptable	23	RY22-0023	RYR-10-014	Acceptable				
8	RY22-0008	RYR-10-014	Acceptable	24	RY22-0024	RYR-10-014	Acceptable				
9	RY22-0009	RYR-10-014	Acceptable	25	RY22-0025	RYR-10-014	Acceptable				
10	RY22-0010	RYR-10-014	Acceptable	26	RY22-0026	RYR-10-014	Acceptable				
11	RY22-0011	RYR-10-014	Acceptable	27	RY22-0027	RYR-10-014	Acceptable				
12	RY22-0012	RYR-10-014	Acceptable	28	RY22-0028	RYR-10-014	Acceptable				
13	RY22-0013	RYR-10-014	Acceptable	29	RY22-0029	RYR-10-014	Acceptable				
14	RY22-0014	RYR-10-014	Acceptable	30	RY22-0030	RYR-10-014	Acceptable				
15	RY22-0015	RYR-10-014	Acceptable	31	RY22-0031	RYR-10-014	Acceptable				
16	RY22-0016	RYR-10-014	Acceptable	32	RY22-0032	RYR-10-014	Acceptable				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Wan Song	Organization:	QC Department
Approved by:	Zhu Yonglan		
NDT Level:	II	Date:	2022 10 12

MAGNETIC PARTICLE INSPECTION REPORT

Customer:		Customer PO#:		Date:	2022 10 12		
Drawing #:	4 1/16-15M	Specification:	API Spec 6A	API Monogram:	Y / N	Report #:	
Part No.:	B04-351	Material:	UNS S17400/17-4PH		Coating:		
Description:	Stem, 4 1/16" 15M Manual FLSR 17-4SS. WITH BLOCK INSTALLED WITH PIN EE LU PSL					40	
Equipment:	CJW5000	Acceptance Criteria:	API 6A/P SL3	Circular AMPS:			
Test Method:		Particle Type:	WET Fluorescent	UV-Light Intensity:	1500 $\mu\text{W}/\text{CM}^2$		
Stage:		Concentration:	0.2	Magnetizing Time:			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
33	RY22-0033	RYR-10-014	Acceptable	49	RY22-0049	RYR-10-014	Acceptable
34	RY22-0034	RYR-10-014	Acceptable	50	RY22-0050	RYR-10-014	Acceptable
35	RY22-0035	RYR-10-014	Acceptable				
36	RY22-0036	RYR-10-014	Acceptable				
37	RY22-0037	RYR-10-014	Acceptable				
38	RY22-0038	RYR-10-014	Acceptable				
39	RY22-0039	RYR-10-014	Acceptable				
40	RY22-0040	RYR-10-014	Acceptable				
41	RY22-0041	RYR-10-014	Acceptable				
42	RY22-0042	RYR-10-014	Acceptable				
43	RY22-0043	RYR-10-014	Acceptable				
44	RY22-0044	RYR-10-014	Acceptable				
45	RY22-0045	RYR-10-014	Acceptable				
46	RY22-0046	RYR-10-014	Acceptable				
47	RY22-0047	RYR-10-014	Acceptable				
48	RY22-0048	RYR-10-014	Acceptable				

Sketch/Inspection Coverage:



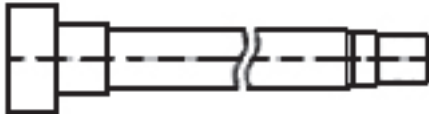
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Wan Song	Organization:	QC Department
Approved by:	Zhu Yonglan	Date:	2022 10 12
NDT Level:	II		

PENETRANT FLAW DETECTION INSPECT

Customer:		Customer PO#:		Date:	2022 10 12
Drawing #:	4 1/16-15M	Specification:	API Spec 6A/ASTM E165	API Monogram:	Y / N
Part No.:	B04-351	Material:	API Spec 6A/ASTM A370		Coating:
Description:	Stem, 4 1/16" 15M Manual FLSR 17-4SS. WITH BLOCK INSTALLED WITH PIN EE LU PSL				Quantity:
TYPE:	DPT-5	Acceptance Criteria:	API 6A/PSL3	FACE	GRINDING
Test Method:	ASTM E165	PENETRATION TIME	10min	DEVELOPE TIME	10min
Stage:		Concentration:	0.2	Magnetizing Time:	
Item	S/N	Heat Log No.	Result	Item	S/N
01	RY22-0001	RYR-10-014	Acceptable	16	RY22-0016
02	RY22-0002	RYR-10-014	Acceptable	17	RY22-0017
03	RY22-0003	RYR-10-014	Acceptable	18	RY22-0018
04	RY22-0004	RYR-10-014	Acceptable	19	RY22-0019
05	RY22-0005	RYR-10-014	Acceptable	20	RY22-0020
06	RY22-0006	RYR-10-014	Acceptable	21	RY22-0021
07	RY22-0007	RYR-10-014	Acceptable	22	RY22-0022
08	RY22-0008	RYR-10-014	Acceptable	23	RY22-0023
09	RY22-0009	RYR-10-014	Acceptable	24	RY22-0024
10	RY22-0010	RYR-10-014	Acceptable	25	RY22-0025
11	RY22-0011	RYR-10-014	Acceptable	26	RY22-0026
12	RY22-0012	RYR-10-014	Acceptable	27	RY22-0027
13	RY22-0013	RYR-10-014	Acceptable	28	RY22-0028
14	RY22-0014	RYR-10-014	Acceptable	29	RY22-0029
15	RY22-0015	RYR-10-014	Acceptable	30	RY22-0030

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Wan Song	Organization:	QC Department
Approved by:	Zhu Yonglan	Date:	2022 10 12
NDT Level:	II		

PENETRANT FLAW DETECTION INSPECT

Customer:				Customer PO#:			Date:	2022 10 12	
Drawing #:	7 1/16-15M	Specification:	API Spec 6A/ASTM E165	API Monogram:	Y / N	Report #:			
Part No.:	B04-351	Material:	API Spec 6A/ASTM A370			Coating:			
Description:	Stem, 4 1/16" 15M Manual FLSR 17-4SS. WITH BLOCK INSTALLED WITH PIN EE LU PSL					Quantity:	40		
TYPE:	DPT-5	Acceptance Criteria:		API 6A/PSL3	FACE			GRINDING	
Test Method:	ASTM E165	PENETRATION TIME		10min	DEVELOPE TIME			10min	
Stage:		Concentration:		0.2	Magnetizing Time:				
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
31	RY22-0031	RYR-10-014	Acceptable	46	RY22-0046	RYR-10-014	Acceptable		
32	RY22-0032	RYR-10-014	Acceptable	47	RY22-0047	RYR-10-014	Acceptable		
33	RY22-0033	RYR-10-014	Acceptable	48	RY22-0048	RYR-10-014	Acceptable		
34	RY22-0034	RYR-10-014	Acceptable	49	RY22-0049	RYR-10-014	Acceptable		
35	RY22-0035	RYR-10-014	Acceptable	50	RY22-0050	RYR-10-014	Acceptable		
36	RY22-036	RYR-10-014	Acceptable						
37	RY22-0037	RYR-10-014	Acceptable						
38	RY22-0038	RYR-10-014	Acceptable						
39	RY22-0039	RYR-10-014	Acceptable						
40	RY22-0040	RYR-10-014	Acceptable						
41	RY22-0041	RYR-10-014	Acceptable						
42	RY22-0042	RYR-10-014	Acceptable						
43	RY22-0043	RYR-10-014	Acceptable						
44	RY22-0044	RYR-10-014	Acceptable						
45	RY22-0045	RYR-10-014	Acceptable						

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Wan Song	Organization:	QC Department
Approved by:	Zhu Yonglan	Date:	
NDT Level:	II		

DRAWING # X-111188-01

REPORT INDEX

Purchase Order: 2022073

Quantity: 150PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (X-111188-01)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 7
2.3	Tungsten carbide spray report	Page - 11
2.4	Penetrate testing report	Page - 12

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2022.5.15
Drawing #:	X-111188-01	Specification:	API 6A/ASTM A370	API Monogram:	No
Report #:	SO-20220515-01				
Part No.:		Material:	410 SS, Per NACE MR0175	Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1				Quantity: 150

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	580	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
2115800348			0.10	0.37	0.34	0.006	0.019	0.12	/	0.01	11.62	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY (ft-lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2205013-01			580	700	24	67	226			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	720°C 5.5h AIR	Temper1:	720°C 5.5h AIR
Temper2:	680°C 5.5h AIR	Temper2:	680°C 5.5h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

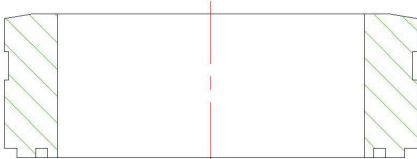
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.15	
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10		API Monogram:	No	Report #:	SO-20220515-01	
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	150	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness		
1	SO22073-2-001	2115800348	208	26	SO22073-2-026	2115800348	214		
2	SO22073-2-002	2115800348	208	27	SO22073-2-027	2115800348	215		
3	SO22073-2-003	2115800348	208	28	SO22073-2-028	2115800348	215		
4	SO22073-2-004	2115800348	208	29	SO22073-2-029	2115800348	215		
5	SO22073-2-005	2115800348	208	30	SO22073-2-030	2115800348	215		
6	SO22073-2-006	2115800348	210	31	SO22073-2-031	2115800348	215		
7	SO22073-2-007	2115800348	210	32	SO22073-2-032	2115800348	215		
8	SO22073-2-008	2115800348	210	33	SO22073-2-033	2115800348	216		
9	SO22073-2-009	2115800348	210	34	SO22073-2-034	2115800348	216		
10	SO22073-2-010	2115800348	210	35	SO22073-2-035	2115800348	216		
11	SO22073-2-011	2115800348	210	36	SO22073-2-036	2115800348	216		
12	SO22073-2-012	2115800348	210	37	SO22073-2-037	2115800348	217		
13	SO22073-2-013	2115800348	211	38	SO22073-2-038	2115800348	217		
14	SO22073-2-014	2115800348	211	39	SO22073-2-039	2115800348	217		
15	SO22073-2-015	2115800348	211	40	SO22073-2-040	2115800348	217		
16	SO22073-2-016	2115800348	211	41	SO22073-2-041	2115800348	217		
17	SO22073-2-017	2115800348	212	42	SO22073-2-042	2115800348	218		
18	SO22073-2-018	2115800348	212	43	SO22073-2-043	2115800348	218		
19	SO22073-2-019	2115800348	212	44	SO22073-2-044	2115800348	218		
20	SO22073-2-020	2115800348	212	45	SO22073-2-045	2115800348	218		
21	SO22073-2-021	2115800348	212	46	SO22073-2-046	2115800348	218		
22	SO22073-2-022	2115800348	213	47	SO22073-2-047	2115800348	218		
23	SO22073-2-023	2115800348	213	48	SO22073-2-048	2115800348	218		
24	SO22073-2-024	2115800348	213	49	SO22073-2-049	2115800348	218		
25	SO22073-2-025	2115800348	214	50	SO22073-2-050	2115800348	219		

Sketch:

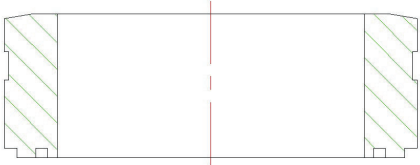


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:				Date:	2022.5.15	
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10		API Monogram:	No		Report #:	SO-20220515-01	
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	150	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness			
51	SO22073-2-051	2115800348	219	76	SO22073-2-076	2115800348	224			
52	SO22073-2-052	2115800348	219	77	SO22073-2-077	2115800348	224			
53	SO22073-2-053	2115800348	219	78	SO22073-2-078	2115800348	224			
54	SO22073-2-054	2115800348	219	79	SO22073-2-079	2115800348	224			
55	SO22073-2-055	2115800348	221	80	SO22073-2-080	2115800348	224			
56	SO22073-2-056	2115800348	221	81	SO22073-2-081	2115800348	224			
57	SO22073-2-057	2115800348	221	82	SO22073-2-082	2115800348	224			
58	SO22073-2-058	2115800348	221	83	SO22073-2-083	2115800348	225			
59	SO22073-2-059	2115800348	222	84	SO22073-2-084	2115800348	225			
60	SO22073-2-060	2115800348	222	85	SO22073-2-085	2115800348	225			
61	SO22073-2-061	2115800348	222	86	SO22073-2-086	2115800348	225			
62	SO22073-2-062	2115800348	222	87	SO22073-2-087	2115800348	225			
63	SO22073-2-063	2115800348	223	88	SO22073-2-088	2115800348	225			
64	SO22073-2-064	2115800348	223	89	SO22073-2-089	2115800348	226			
65	SO22073-2-065	2115800348	223	90	SO22073-2-090	2115800348	226			
66	SO22073-2-066	2115800348	223	91	SO22073-2-091	2115800348	226			
67	SO22073-2-067	2115800348	223	92	SO22073-2-092	2115800348	226			
68	SO22073-2-068	2115800348	223	93	SO22073-2-093	2115800348	228			
69	SO22073-2-069	2115800348	223	94	SO22073-2-094	2115800348	228			
70	SO22073-2-070	2115800348	223	95	SO22073-2-095	2115800348	228			
71	SO22073-2-071	2115800348	223	96	SO22073-2-096	2115800348	228			
72	SO22073-2-072	2115800348	223	97	SO22073-2-097	2115800348	228			
73	SO22073-2-073	2115800348	224	98	SO22073-2-098	2115800348	228			
74	SO22073-2-074	2115800348	224	99	SO22073-2-099	2115800348	228			
75	SO22073-2-075	2115800348	224	100	SO22073-2-100	2115800348	228			

Sketch:

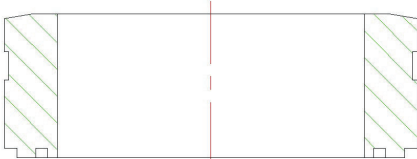


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.15
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220515-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	150	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness	
101	SO22073-2-101	2115800348	228	126	SO22073-2-126	2115800348	232	
102	SO22073-2-102	2115800348	228	127	SO22073-2-127	2115800348	232	
103	SO22073-2-103	2115800348	229	128	SO22073-2-128	2115800348	232	
104	SO22073-2-104	2115800348	229	129	SO22073-2-129	2115800348	232	
105	SO22073-2-105	2115800348	229	130	SO22073-2-130	2115800348	232	
106	SO22073-2-106	2115800348	229	131	SO22073-2-131	2115800348	232	
107	SO22073-2-107	2115800348	229	132	SO22073-2-132	2115800348	232	
108	SO22073-2-108	2115800348	229	133	SO22073-2-133	2115800348	232	
109	SO22073-2-109	2115800348	229	134	SO22073-2-134	2115800348	232	
110	SO22073-2-110	2115800348	229	135	SO22073-2-135	2115800348	234	
111	SO22073-2-111	2115800348	230	136	SO22073-2-136	2115800348	234	
112	SO22073-2-112	2115800348	230	137	SO22073-2-137	2115800348	234	
113	SO22073-2-113	2115800348	230	138	SO22073-2-138	2115800348	234	
114	SO22073-2-114	2115800348	230	139	SO22073-2-139	2115800348	234	
115	SO22073-2-115	2115800348	230	140	SO22073-2-140	2115800348	234	
116	SO22073-2-116	2115800348	230	141	SO22073-2-141	2115800348	234	
117	SO22073-2-117	2115800348	230	142	SO22073-2-142	2115800348	234	
118	SO22073-2-118	2115800348	230	143	SO22073-2-143	2115800348	234	
119	SO22073-2-119	2115800348	230	144	SO22073-2-144	2115800348	234	
120	SO22073-2-120	2115800348	230	145	SO22073-2-145	2115800348	234	
121	SO22073-2-121	2115800348	230	146	SO22073-2-146	2115800348	234	
122	SO22073-2-122	2115800348	231	147	SO22073-2-147	2115800348	234	
123	SO22073-2-123	2115800348	231	148	SO22073-2-148	2115800348	234	
124	SO22073-2-124	2115800348	232	149	SO22073-2-149	2115800348	234	
125	SO22073-2-125	2115800348	232	150	SO22073-2-150	2115800348	234	

Sketch:

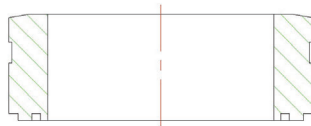


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.14		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2206-Q53		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	150		
Equipment:	DPT-8	Acceptance Criteria:			API 6A/PSL3	Test Method:			DYE		
Penetrant Type:	Solvent	Penetration time:			15min	Developing time:			10min		
Stage:	After fine finishing				Inspected surface:	Seat (body)					
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22073-2-001	2115800348	208	26	SO22073-2-026	2115800348	214				
2	SO22073-2-002	2115800348	208	27	SO22073-2-027	2115800348	215				
3	SO22073-2-003	2115800348	208	28	SO22073-2-028	2115800348	215				
4	SO22073-2-004	2115800348	208	29	SO22073-2-029	2115800348	215				
5	SO22073-2-005	2115800348	208	30	SO22073-2-030	2115800348	215				
6	SO22073-2-006	2115800348	210	31	SO22073-2-031	2115800348	215				
7	SO22073-2-007	2115800348	210	32	SO22073-2-032	2115800348	215				
8	SO22073-2-008	2115800348	210	33	SO22073-2-033	2115800348	216				
9	SO22073-2-009	2115800348	210	34	SO22073-2-034	2115800348	216				
10	SO22073-2-010	2115800348	210	35	SO22073-2-035	2115800348	216				
11	SO22073-2-011	2115800348	210	36	SO22073-2-036	2115800348	216				
12	SO22073-2-012	2115800348	210	37	SO22073-2-037	2115800348	217				
13	SO22073-2-013	2115800348	211	38	SO22073-2-038	2115800348	217				
14	SO22073-2-014	2115800348	211	39	SO22073-2-039	2115800348	217				
15	SO22073-2-015	2115800348	211	40	SO22073-2-040	2115800348	217				
16	SO22073-2-016	2115800348	211	41	SO22073-2-041	2115800348	217				
17	SO22073-2-017	2115800348	212	42	SO22073-2-042	2115800348	218				
18	SO22073-2-018	2115800348	212	43	SO22073-2-043	2115800348	218				
19	SO22073-2-019	2115800348	212	44	SO22073-2-044	2115800348	218				
20	SO22073-2-020	2115800348	212	45	SO22073-2-045	2115800348	218				
21	SO22073-2-021	2115800348	212	46	SO22073-2-046	2115800348	218				
22	SO22073-2-022	2115800348	213	47	SO22073-2-047	2115800348	218				
23	SO22073-2-023	2115800348	213	48	SO22073-2-048	2115800348	218				
24	SO22073-2-024	2115800348	213	49	SO22073-2-049	2115800348	218				
25	SO22073-2-025	2115800348	214	50	SO22073-2-050	2115800348	219				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Ji LIN	Approved by:	Ji WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.6.14

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.6.14
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-Q53	
Part No.:	Material:		410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	150	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:				DYE
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:				10min
Stage:	After fine finishing			Inspected surface:	Seat (body)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
51	SO22073-2-051	2115800348	219	76	SO22073-2-076	2115800348	224	
52	SO22073-2-052	2115800348	219	77	SO22073-2-077	2115800348	224	
53	SO22073-2-053	2115800348	219	78	SO22073-2-078	2115800348	224	
54	SO22073-2-054	2115800348	219	79	SO22073-2-079	2115800348	224	
55	SO22073-2-055	2115800348	221	80	SO22073-2-080	2115800348	224	
56	SO22073-2-056	2115800348	221	81	SO22073-2-081	2115800348	224	
57	SO22073-2-057	2115800348	221	82	SO22073-2-082	2115800348	224	
58	SO22073-2-058	2115800348	221	83	SO22073-2-083	2115800348	225	
59	SO22073-2-059	2115800348	222	84	SO22073-2-084	2115800348	225	
60	SO22073-2-060	2115800348	222	85	SO22073-2-085	2115800348	225	
61	SO22073-2-061	2115800348	222	86	SO22073-2-086	2115800348	225	
62	SO22073-2-062	2115800348	222	87	SO22073-2-087	2115800348	225	
63	SO22073-2-063	2115800348	223	88	SO22073-2-088	2115800348	225	
64	SO22073-2-064	2115800348	223	89	SO22073-2-089	2115800348	226	
65	SO22073-2-065	2115800348	223	90	SO22073-2-090	2115800348	226	
66	SO22073-2-066	2115800348	223	91	SO22073-2-091	2115800348	226	
67	SO22073-2-067	2115800348	223	92	SO22073-2-092	2115800348	226	
68	SO22073-2-068	2115800348	223	93	SO22073-2-093	2115800348	228	
69	SO22073-2-069	2115800348	223	94	SO22073-2-094	2115800348	228	
70	SO22073-2-070	2115800348	223	95	SO22073-2-095	2115800348	228	
71	SO22073-2-071	2115800348	223	96	SO22073-2-096	2115800348	228	
72	SO22073-2-072	2115800348	223	97	SO22073-2-097	2115800348	228	
73	SO22073-2-073	2115800348	224	98	SO22073-2-098	2115800348	228	
74	SO22073-2-074	2115800348	224	99	SO22073-2-099	2115800348	228	
75	SO22073-2-075	2115800348	224	100	SO22073-2-100	2115800348	228	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.14

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.14		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No		Report #:	NCS-2206-Q53			
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC			
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	150			
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
101	SO22073-2-101	2115800348	228	126	SO22073-2-126	2115800348	232				
102	SO22073-2-102	2115800348	228	127	SO22073-2-127	2115800348	232				
103	SO22073-2-103	2115800348	229	128	SO22073-2-128	2115800348	232				
104	SO22073-2-104	2115800348	229	129	SO22073-2-129	2115800348	232				
105	SO22073-2-105	2115800348	229	130	SO22073-2-130	2115800348	232				
106	SO22073-2-106	2115800348	229	131	SO22073-2-131	2115800348	232				
107	SO22073-2-107	2115800348	229	132	SO22073-2-132	2115800348	232				
108	SO22073-2-108	2115800348	229	133	SO22073-2-133	2115800348	232				
109	SO22073-2-109	2115800348	229	134	SO22073-2-134	2115800348	232				
110	SO22073-2-110	2115800348	229	135	SO22073-2-135	2115800348	234				
111	SO22073-2-111	2115800348	230	136	SO22073-2-136	2115800348	234				
112	SO22073-2-112	2115800348	230	137	SO22073-2-137	2115800348	234				
113	SO22073-2-113	2115800348	230	138	SO22073-2-138	2115800348	234				
114	SO22073-2-114	2115800348	230	139	SO22073-2-139	2115800348	234				
115	SO22073-2-115	2115800348	230	140	SO22073-2-140	2115800348	234				
116	SO22073-2-116	2115800348	230	141	SO22073-2-141	2115800348	234				
117	SO22073-2-117	2115800348	230	142	SO22073-2-142	2115800348	234				
118	SO22073-2-118	2115800348	230	143	SO22073-2-143	2115800348	234				
119	SO22073-2-119	2115800348	230	144	SO22073-2-144	2115800348	234				
120	SO22073-2-120	2115800348	230	145	SO22073-2-145	2115800348	234				
121	SO22073-2-121	2115800348	230	146	SO22073-2-146	2115800348	234				
122	SO22073-2-122	2115800348	231	147	SO22073-2-147	2115800348	234				
123	SO22073-2-123	2115800348	231	148	SO22073-2-148	2115800348	234				
124	SO22073-2-124	2115800348	232	149	SO22073-2-149	2115800348	234				
125	SO22073-2-125	2115800348	232	150	SO22073-2-150	2115800348	234				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.6.14	

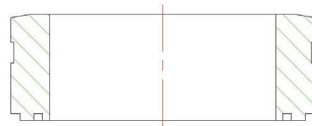
TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.6.16	
Drawing #:	X-111188-01	Specification :	API 6A		API Monogram:	No	Report #:	RS220616-01		
Part No.:		Material:	410 SS,Per NACE MR0175					Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	150	
Dimension inspection										
ITEM	Hardness test		Bonding strength		Porosity		Coating type			
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4			
Actual	1171		77		0.77		WC86-Co10-Cr4			
Chemical component										
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)					
standard	5.1-6.0	9.0-11.0	3.0-5.0							
Actual	5.40	9.70	3.89							
Evaluation & Disposition:			Found to be satisfactory							
Inspected by:			SHI LINGUI							
Approved by:			JI WEI				Date:	2022.6.16		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.17		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2206-H53		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	150		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22073-2-001	2115800348	208	26	SO22073-2-026	2115800348	214				
2	SO22073-2-002	2115800348	208	27	SO22073-2-027	2115800348	215				
3	SO22073-2-003	2115800348	208	28	SO22073-2-028	2115800348	215				
4	SO22073-2-004	2115800348	208	29	SO22073-2-029	2115800348	215				
5	SO22073-2-005	2115800348	208	30	SO22073-2-030	2115800348	215				
6	SO22073-2-006	2115800348	210	31	SO22073-2-031	2115800348	215				
7	SO22073-2-007	2115800348	210	32	SO22073-2-032	2115800348	215				
8	SO22073-2-008	2115800348	210	33	SO22073-2-033	2115800348	216				
9	SO22073-2-009	2115800348	210	34	SO22073-2-034	2115800348	216				
10	SO22073-2-010	2115800348	210	35	SO22073-2-035	2115800348	216				
11	SO22073-2-011	2115800348	210	36	SO22073-2-036	2115800348	216				
12	SO22073-2-012	2115800348	210	37	SO22073-2-037	2115800348	217				
13	SO22073-2-013	2115800348	211	38	SO22073-2-038	2115800348	217				
14	SO22073-2-014	2115800348	211	39	SO22073-2-039	2115800348	217				
15	SO22073-2-015	2115800348	211	40	SO22073-2-040	2115800348	217				
16	SO22073-2-016	2115800348	211	41	SO22073-2-041	2115800348	217				
17	SO22073-2-017	2115800348	212	42	SO22073-2-042	2115800348	218				
18	SO22073-2-018	2115800348	212	43	SO22073-2-043	2115800348	218				
19	SO22073-2-019	2115800348	212	44	SO22073-2-044	2115800348	218				
20	SO22073-2-020	2115800348	212	45	SO22073-2-045	2115800348	218				
21	SO22073-2-021	2115800348	212	46	SO22073-2-046	2115800348	218				
22	SO22073-2-022	2115800348	213	47	SO22073-2-047	2115800348	218				
23	SO22073-2-023	2115800348	213	48	SO22073-2-048	2115800348	218				
24	SO22073-2-024	2115800348	213	49	SO22073-2-049	2115800348	218				
25	SO22073-2-025	2115800348	214	50	SO22073-2-050	2115800348	219				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Ji LIN	Approved by:	Ji WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.6.17

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.6.17	
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-H53
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	150
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22073-2-051	2115800348	219	76	SO22073-2-076	2115800348	224
52	SO22073-2-052	2115800348	219	77	SO22073-2-077	2115800348	224
53	SO22073-2-053	2115800348	219	78	SO22073-2-078	2115800348	224
54	SO22073-2-054	2115800348	219	79	SO22073-2-079	2115800348	224
55	SO22073-2-055	2115800348	221	80	SO22073-2-080	2115800348	224
56	SO22073-2-056	2115800348	221	81	SO22073-2-081	2115800348	224
57	SO22073-2-057	2115800348	221	82	SO22073-2-082	2115800348	224
58	SO22073-2-058	2115800348	221	83	SO22073-2-083	2115800348	225
59	SO22073-2-059	2115800348	222	84	SO22073-2-084	2115800348	225
60	SO22073-2-060	2115800348	222	85	SO22073-2-085	2115800348	225
61	SO22073-2-061	2115800348	222	86	SO22073-2-086	2115800348	225
62	SO22073-2-062	2115800348	222	87	SO22073-2-087	2115800348	225
63	SO22073-2-063	2115800348	223	88	SO22073-2-088	2115800348	225
64	SO22073-2-064	2115800348	223	89	SO22073-2-089	2115800348	226
65	SO22073-2-065	2115800348	223	90	SO22073-2-090	2115800348	226
66	SO22073-2-066	2115800348	223	91	SO22073-2-091	2115800348	226
67	SO22073-2-067	2115800348	223	92	SO22073-2-092	2115800348	226
68	SO22073-2-068	2115800348	223	93	SO22073-2-093	2115800348	228
69	SO22073-2-069	2115800348	223	94	SO22073-2-094	2115800348	228
70	SO22073-2-070	2115800348	223	95	SO22073-2-095	2115800348	228
71	SO22073-2-071	2115800348	223	96	SO22073-2-096	2115800348	228
72	SO22073-2-072	2115800348	223	97	SO22073-2-097	2115800348	228
73	SO22073-2-073	2115800348	224	98	SO22073-2-098	2115800348	228
74	SO22073-2-074	2115800348	224	99	SO22073-2-099	2115800348	228
75	SO22073-2-075	2115800348	224	100	SO22073-2-100	2115800348	228

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.17

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.17		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2206-H53		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	150		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
101	SO22073-2-101	2115800348	228	126	SO22073-2-126	2115800348	232				
102	SO22073-2-102	2115800348	228	127	SO22073-2-127	2115800348	232				
103	SO22073-2-103	2115800348	229	128	SO22073-2-128	2115800348	232				
104	SO22073-2-104	2115800348	229	129	SO22073-2-129	2115800348	232				
105	SO22073-2-105	2115800348	229	130	SO22073-2-130	2115800348	232				
106	SO22073-2-106	2115800348	229	131	SO22073-2-131	2115800348	232				
107	SO22073-2-107	2115800348	229	132	SO22073-2-132	2115800348	232				
108	SO22073-2-108	2115800348	229	133	SO22073-2-133	2115800348	232				
109	SO22073-2-109	2115800348	229	134	SO22073-2-134	2115800348	232				
110	SO22073-2-110	2115800348	229	135	SO22073-2-135	2115800348	234				
111	SO22073-2-111	2115800348	230	136	SO22073-2-136	2115800348	234				
112	SO22073-2-112	2115800348	230	137	SO22073-2-137	2115800348	234				
113	SO22073-2-113	2115800348	230	138	SO22073-2-138	2115800348	234				
114	SO22073-2-114	2115800348	230	139	SO22073-2-139	2115800348	234				
115	SO22073-2-115	2115800348	230	140	SO22073-2-140	2115800348	234				
116	SO22073-2-116	2115800348	230	141	SO22073-2-141	2115800348	234				
117	SO22073-2-117	2115800348	230	142	SO22073-2-142	2115800348	234				
118	SO22073-2-118	2115800348	230	143	SO22073-2-143	2115800348	234				
119	SO22073-2-119	2115800348	230	144	SO22073-2-144	2115800348	234				
120	SO22073-2-120	2115800348	230	145	SO22073-2-145	2115800348	234				
121	SO22073-2-121	2115800348	230	146	SO22073-2-146	2115800348	234				
122	SO22073-2-122	2115800348	231	147	SO22073-2-147	2115800348	234				
123	SO22073-2-123	2115800348	231	148	SO22073-2-148	2115800348	234				
124	SO22073-2-124	2115800348	232	149	SO22073-2-149	2115800348	234				
125	SO22073-2-125	2115800348	232	150	SO22073-2-150	2115800348	234				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.6.17	

DRAWING # X-111188-01

REPORT INDEX

Purchase Order: 2022073

Quantity: 150PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (X-111188-01)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 7
2.3	Tungsten carbide spray report	Page - 11
2.4	Penetrate testing report	Page - 12

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2022.5.15
Drawing #:	X-111188-01	Specification:	API 6A/ASTM A370	API Monogram:	No
Report #:	SO-20220515-01				
Part No.:		Material:	410 SS, Per NACE MR0175	Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1				Quantity: 150

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	580	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
2115800348			0.10	0.37	0.34	0.006	0.019	0.12	/	0.01	11.62	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY (ft-lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2205013-01			580	700	24	67	226			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	720°C 5.5h AIR	Temper1:	720°C 5.5h AIR
Temper2:	680°C 5.5h AIR	Temper2:	680°C 5.5h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

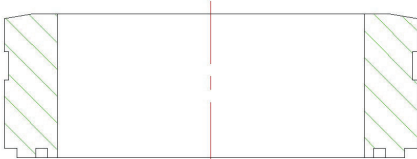
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.15
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220515-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	150	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness	
1	SO22073-2-001	2115800348	208	26	SO22073-2-026	2115800348	214	
2	SO22073-2-002	2115800348	208	27	SO22073-2-027	2115800348	215	
3	SO22073-2-003	2115800348	208	28	SO22073-2-028	2115800348	215	
4	SO22073-2-004	2115800348	208	29	SO22073-2-029	2115800348	215	
5	SO22073-2-005	2115800348	208	30	SO22073-2-030	2115800348	215	
6	SO22073-2-006	2115800348	210	31	SO22073-2-031	2115800348	215	
7	SO22073-2-007	2115800348	210	32	SO22073-2-032	2115800348	215	
8	SO22073-2-008	2115800348	210	33	SO22073-2-033	2115800348	216	
9	SO22073-2-009	2115800348	210	34	SO22073-2-034	2115800348	216	
10	SO22073-2-010	2115800348	210	35	SO22073-2-035	2115800348	216	
11	SO22073-2-011	2115800348	210	36	SO22073-2-036	2115800348	216	
12	SO22073-2-012	2115800348	210	37	SO22073-2-037	2115800348	217	
13	SO22073-2-013	2115800348	211	38	SO22073-2-038	2115800348	217	
14	SO22073-2-014	2115800348	211	39	SO22073-2-039	2115800348	217	
15	SO22073-2-015	2115800348	211	40	SO22073-2-040	2115800348	217	
16	SO22073-2-016	2115800348	211	41	SO22073-2-041	2115800348	217	
17	SO22073-2-017	2115800348	212	42	SO22073-2-042	2115800348	218	
18	SO22073-2-018	2115800348	212	43	SO22073-2-043	2115800348	218	
19	SO22073-2-019	2115800348	212	44	SO22073-2-044	2115800348	218	
20	SO22073-2-020	2115800348	212	45	SO22073-2-045	2115800348	218	
21	SO22073-2-021	2115800348	212	46	SO22073-2-046	2115800348	218	
22	SO22073-2-022	2115800348	213	47	SO22073-2-047	2115800348	218	
23	SO22073-2-023	2115800348	213	48	SO22073-2-048	2115800348	218	
24	SO22073-2-024	2115800348	213	49	SO22073-2-049	2115800348	218	
25	SO22073-2-025	2115800348	214	50	SO22073-2-050	2115800348	219	

Sketch:



Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.15
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220515-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	150	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness	
51	SO22073-2-051	2115800348	219	76	SO22073-2-076	2115800348	224	
52	SO22073-2-052	2115800348	219	77	SO22073-2-077	2115800348	224	
53	SO22073-2-053	2115800348	219	78	SO22073-2-078	2115800348	224	
54	SO22073-2-054	2115800348	219	79	SO22073-2-079	2115800348	224	
55	SO22073-2-055	2115800348	221	80	SO22073-2-080	2115800348	224	
56	SO22073-2-056	2115800348	221	81	SO22073-2-081	2115800348	224	
57	SO22073-2-057	2115800348	221	82	SO22073-2-082	2115800348	224	
58	SO22073-2-058	2115800348	221	83	SO22073-2-083	2115800348	225	
59	SO22073-2-059	2115800348	222	84	SO22073-2-084	2115800348	225	
60	SO22073-2-060	2115800348	222	85	SO22073-2-085	2115800348	225	
61	SO22073-2-061	2115800348	222	86	SO22073-2-086	2115800348	225	
62	SO22073-2-062	2115800348	222	87	SO22073-2-087	2115800348	225	
63	SO22073-2-063	2115800348	223	88	SO22073-2-088	2115800348	225	
64	SO22073-2-064	2115800348	223	89	SO22073-2-089	2115800348	226	
65	SO22073-2-065	2115800348	223	90	SO22073-2-090	2115800348	226	
66	SO22073-2-066	2115800348	223	91	SO22073-2-091	2115800348	226	
67	SO22073-2-067	2115800348	223	92	SO22073-2-092	2115800348	226	
68	SO22073-2-068	2115800348	223	93	SO22073-2-093	2115800348	228	
69	SO22073-2-069	2115800348	223	94	SO22073-2-094	2115800348	228	
70	SO22073-2-070	2115800348	223	95	SO22073-2-095	2115800348	228	
71	SO22073-2-071	2115800348	223	96	SO22073-2-096	2115800348	228	
72	SO22073-2-072	2115800348	223	97	SO22073-2-097	2115800348	228	
73	SO22073-2-073	2115800348	224	98	SO22073-2-098	2115800348	228	
74	SO22073-2-074	2115800348	224	99	SO22073-2-099	2115800348	228	
75	SO22073-2-075	2115800348	224	100	SO22073-2-100	2115800348	228	

Sketch:

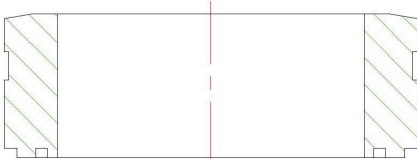
Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.15
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220515-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	150	

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
101	SO22073-2-101	2115800348	228	126	SO22073-2-126	2115800348	232
102	SO22073-2-102	2115800348	228	127	SO22073-2-127	2115800348	232
103	SO22073-2-103	2115800348	229	128	SO22073-2-128	2115800348	232
104	SO22073-2-104	2115800348	229	129	SO22073-2-129	2115800348	232
105	SO22073-2-105	2115800348	229	130	SO22073-2-130	2115800348	232
106	SO22073-2-106	2115800348	229	131	SO22073-2-131	2115800348	232
107	SO22073-2-107	2115800348	229	132	SO22073-2-132	2115800348	232
108	SO22073-2-108	2115800348	229	133	SO22073-2-133	2115800348	232
109	SO22073-2-109	2115800348	229	134	SO22073-2-134	2115800348	232
110	SO22073-2-110	2115800348	229	135	SO22073-2-135	2115800348	234
111	SO22073-2-111	2115800348	230	136	SO22073-2-136	2115800348	234
112	SO22073-2-112	2115800348	230	137	SO22073-2-137	2115800348	234
113	SO22073-2-113	2115800348	230	138	SO22073-2-138	2115800348	234
114	SO22073-2-114	2115800348	230	139	SO22073-2-139	2115800348	234
115	SO22073-2-115	2115800348	230	140	SO22073-2-140	2115800348	234
116	SO22073-2-116	2115800348	230	141	SO22073-2-141	2115800348	234
117	SO22073-2-117	2115800348	230	142	SO22073-2-142	2115800348	234
118	SO22073-2-118	2115800348	230	143	SO22073-2-143	2115800348	234
119	SO22073-2-119	2115800348	230	144	SO22073-2-144	2115800348	234
120	SO22073-2-120	2115800348	230	145	SO22073-2-145	2115800348	234
121	SO22073-2-121	2115800348	230	146	SO22073-2-146	2115800348	234
122	SO22073-2-122	2115800348	231	147	SO22073-2-147	2115800348	234
123	SO22073-2-123	2115800348	231	148	SO22073-2-148	2115800348	234
124	SO22073-2-124	2115800348	232	149	SO22073-2-149	2115800348	234
125	SO22073-2-125	2115800348	232	150	SO22073-2-150	2115800348	234

Sketch:

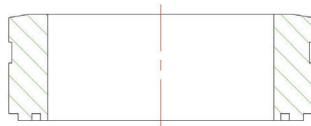


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.6.14	
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No	Report #:	NCS-2206-Q53	
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	150	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE		
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min		
Stage:	After fine finishing			Inspected surface:	Seat (body)				
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness		
1	SO22073-2-001	2115800348	208	26	SO22073-2-026	2115800348	214		
2	SO22073-2-002	2115800348	208	27	SO22073-2-027	2115800348	215		
3	SO22073-2-003	2115800348	208	28	SO22073-2-028	2115800348	215		
4	SO22073-2-004	2115800348	208	29	SO22073-2-029	2115800348	215		
5	SO22073-2-005	2115800348	208	30	SO22073-2-030	2115800348	215		
6	SO22073-2-006	2115800348	210	31	SO22073-2-031	2115800348	215		
7	SO22073-2-007	2115800348	210	32	SO22073-2-032	2115800348	215		
8	SO22073-2-008	2115800348	210	33	SO22073-2-033	2115800348	216		
9	SO22073-2-009	2115800348	210	34	SO22073-2-034	2115800348	216		
10	SO22073-2-010	2115800348	210	35	SO22073-2-035	2115800348	216		
11	SO22073-2-011	2115800348	210	36	SO22073-2-036	2115800348	216		
12	SO22073-2-012	2115800348	210	37	SO22073-2-037	2115800348	217		
13	SO22073-2-013	2115800348	211	38	SO22073-2-038	2115800348	217		
14	SO22073-2-014	2115800348	211	39	SO22073-2-039	2115800348	217		
15	SO22073-2-015	2115800348	211	40	SO22073-2-040	2115800348	217		
16	SO22073-2-016	2115800348	211	41	SO22073-2-041	2115800348	217		
17	SO22073-2-017	2115800348	212	42	SO22073-2-042	2115800348	218		
18	SO22073-2-018	2115800348	212	43	SO22073-2-043	2115800348	218		
19	SO22073-2-019	2115800348	212	44	SO22073-2-044	2115800348	218		
20	SO22073-2-020	2115800348	212	45	SO22073-2-045	2115800348	218		
21	SO22073-2-021	2115800348	212	46	SO22073-2-046	2115800348	218		
22	SO22073-2-022	2115800348	213	47	SO22073-2-047	2115800348	218		
23	SO22073-2-023	2115800348	213	48	SO22073-2-048	2115800348	218		
24	SO22073-2-024	2115800348	213	49	SO22073-2-049	2115800348	218		
25	SO22073-2-025	2115800348	214	50	SO22073-2-050	2115800348	219		

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Jl LIN	Approved by:	Jl WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.6.14

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.6.14
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-Q53	
Part No.:	Material:		410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	150	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:				DYE
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:				10min
Stage:	After fine finishing			Inspected surface:	Seat (body)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
51	SO22073-2-051	2115800348	219	76	SO22073-2-076	2115800348	224	
52	SO22073-2-052	2115800348	219	77	SO22073-2-077	2115800348	224	
53	SO22073-2-053	2115800348	219	78	SO22073-2-078	2115800348	224	
54	SO22073-2-054	2115800348	219	79	SO22073-2-079	2115800348	224	
55	SO22073-2-055	2115800348	221	80	SO22073-2-080	2115800348	224	
56	SO22073-2-056	2115800348	221	81	SO22073-2-081	2115800348	224	
57	SO22073-2-057	2115800348	221	82	SO22073-2-082	2115800348	224	
58	SO22073-2-058	2115800348	221	83	SO22073-2-083	2115800348	225	
59	SO22073-2-059	2115800348	222	84	SO22073-2-084	2115800348	225	
60	SO22073-2-060	2115800348	222	85	SO22073-2-085	2115800348	225	
61	SO22073-2-061	2115800348	222	86	SO22073-2-086	2115800348	225	
62	SO22073-2-062	2115800348	222	87	SO22073-2-087	2115800348	225	
63	SO22073-2-063	2115800348	223	88	SO22073-2-088	2115800348	225	
64	SO22073-2-064	2115800348	223	89	SO22073-2-089	2115800348	226	
65	SO22073-2-065	2115800348	223	90	SO22073-2-090	2115800348	226	
66	SO22073-2-066	2115800348	223	91	SO22073-2-091	2115800348	226	
67	SO22073-2-067	2115800348	223	92	SO22073-2-092	2115800348	226	
68	SO22073-2-068	2115800348	223	93	SO22073-2-093	2115800348	228	
69	SO22073-2-069	2115800348	223	94	SO22073-2-094	2115800348	228	
70	SO22073-2-070	2115800348	223	95	SO22073-2-095	2115800348	228	
71	SO22073-2-071	2115800348	223	96	SO22073-2-096	2115800348	228	
72	SO22073-2-072	2115800348	223	97	SO22073-2-097	2115800348	228	
73	SO22073-2-073	2115800348	224	98	SO22073-2-098	2115800348	228	
74	SO22073-2-074	2115800348	224	99	SO22073-2-099	2115800348	228	
75	SO22073-2-075	2115800348	224	100	SO22073-2-100	2115800348	228	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.14

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.14		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No		Report #:	NCS-2206-Q53			
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC			
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	150			
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
101	SO22073-2-101	2115800348	228	126	SO22073-2-126	2115800348	232				
102	SO22073-2-102	2115800348	228	127	SO22073-2-127	2115800348	232				
103	SO22073-2-103	2115800348	229	128	SO22073-2-128	2115800348	232				
104	SO22073-2-104	2115800348	229	129	SO22073-2-129	2115800348	232				
105	SO22073-2-105	2115800348	229	130	SO22073-2-130	2115800348	232				
106	SO22073-2-106	2115800348	229	131	SO22073-2-131	2115800348	232				
107	SO22073-2-107	2115800348	229	132	SO22073-2-132	2115800348	232				
108	SO22073-2-108	2115800348	229	133	SO22073-2-133	2115800348	232				
109	SO22073-2-109	2115800348	229	134	SO22073-2-134	2115800348	232				
110	SO22073-2-110	2115800348	229	135	SO22073-2-135	2115800348	234				
111	SO22073-2-111	2115800348	230	136	SO22073-2-136	2115800348	234				
112	SO22073-2-112	2115800348	230	137	SO22073-2-137	2115800348	234				
113	SO22073-2-113	2115800348	230	138	SO22073-2-138	2115800348	234				
114	SO22073-2-114	2115800348	230	139	SO22073-2-139	2115800348	234				
115	SO22073-2-115	2115800348	230	140	SO22073-2-140	2115800348	234				
116	SO22073-2-116	2115800348	230	141	SO22073-2-141	2115800348	234				
117	SO22073-2-117	2115800348	230	142	SO22073-2-142	2115800348	234				
118	SO22073-2-118	2115800348	230	143	SO22073-2-143	2115800348	234				
119	SO22073-2-119	2115800348	230	144	SO22073-2-144	2115800348	234				
120	SO22073-2-120	2115800348	230	145	SO22073-2-145	2115800348	234				
121	SO22073-2-121	2115800348	230	146	SO22073-2-146	2115800348	234				
122	SO22073-2-122	2115800348	231	147	SO22073-2-147	2115800348	234				
123	SO22073-2-123	2115800348	231	148	SO22073-2-148	2115800348	234				
124	SO22073-2-124	2115800348	232	149	SO22073-2-149	2115800348	234				
125	SO22073-2-125	2115800348	232	150	SO22073-2-150	2115800348	234				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.6.14	

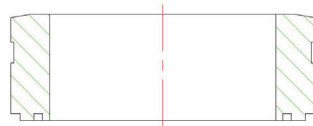
TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.6.16	
Drawing #:	X-111188-01	Specification :	API 6A		API Monogram:	No	Report #:	RS220616-01		
Part No.:		Material:	410 SS,Per NACE MR0175					Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	150	
Dimension inspection										
ITEM	Hardness test		Bonding strength		Porosity		Coating type			
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4			
Actual	1171		77		0.77		WC86-Co10-Cr4			
Chemical component										
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)					
standard	5.1-6.0	9.0-11.0	3.0-5.0							
Actual	5.40	9.70	3.89							
Evaluation & Disposition:			Found to be satisfactory							
Inspected by:			SHI LINGUI							
Approved by:			JI WEI				Date:	2022.6.16		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.17		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2206-H53		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	150		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22073-2-001	2115800348	208	26	SO22073-2-026	2115800348	214				
2	SO22073-2-002	2115800348	208	27	SO22073-2-027	2115800348	215				
3	SO22073-2-003	2115800348	208	28	SO22073-2-028	2115800348	215				
4	SO22073-2-004	2115800348	208	29	SO22073-2-029	2115800348	215				
5	SO22073-2-005	2115800348	208	30	SO22073-2-030	2115800348	215				
6	SO22073-2-006	2115800348	210	31	SO22073-2-031	2115800348	215				
7	SO22073-2-007	2115800348	210	32	SO22073-2-032	2115800348	215				
8	SO22073-2-008	2115800348	210	33	SO22073-2-033	2115800348	216				
9	SO22073-2-009	2115800348	210	34	SO22073-2-034	2115800348	216				
10	SO22073-2-010	2115800348	210	35	SO22073-2-035	2115800348	216				
11	SO22073-2-011	2115800348	210	36	SO22073-2-036	2115800348	216				
12	SO22073-2-012	2115800348	210	37	SO22073-2-037	2115800348	217				
13	SO22073-2-013	2115800348	211	38	SO22073-2-038	2115800348	217				
14	SO22073-2-014	2115800348	211	39	SO22073-2-039	2115800348	217				
15	SO22073-2-015	2115800348	211	40	SO22073-2-040	2115800348	217				
16	SO22073-2-016	2115800348	211	41	SO22073-2-041	2115800348	217				
17	SO22073-2-017	2115800348	212	42	SO22073-2-042	2115800348	218				
18	SO22073-2-018	2115800348	212	43	SO22073-2-043	2115800348	218				
19	SO22073-2-019	2115800348	212	44	SO22073-2-044	2115800348	218				
20	SO22073-2-020	2115800348	212	45	SO22073-2-045	2115800348	218				
21	SO22073-2-021	2115800348	212	46	SO22073-2-046	2115800348	218				
22	SO22073-2-022	2115800348	213	47	SO22073-2-047	2115800348	218				
23	SO22073-2-023	2115800348	213	48	SO22073-2-048	2115800348	218				
24	SO22073-2-024	2115800348	213	49	SO22073-2-049	2115800348	218				
25	SO22073-2-025	2115800348	214	50	SO22073-2-050	2115800348	219				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Ji LIN	Approved by:	Ji WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.6.17

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.6.17	
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-H53
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	150
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22073-2-051	2115800348	219	76	SO22073-2-076	2115800348	224
52	SO22073-2-052	2115800348	219	77	SO22073-2-077	2115800348	224
53	SO22073-2-053	2115800348	219	78	SO22073-2-078	2115800348	224
54	SO22073-2-054	2115800348	219	79	SO22073-2-079	2115800348	224
55	SO22073-2-055	2115800348	221	80	SO22073-2-080	2115800348	224
56	SO22073-2-056	2115800348	221	81	SO22073-2-081	2115800348	224
57	SO22073-2-057	2115800348	221	82	SO22073-2-082	2115800348	224
58	SO22073-2-058	2115800348	221	83	SO22073-2-083	2115800348	225
59	SO22073-2-059	2115800348	222	84	SO22073-2-084	2115800348	225
60	SO22073-2-060	2115800348	222	85	SO22073-2-085	2115800348	225
61	SO22073-2-061	2115800348	222	86	SO22073-2-086	2115800348	225
62	SO22073-2-062	2115800348	222	87	SO22073-2-087	2115800348	225
63	SO22073-2-063	2115800348	223	88	SO22073-2-088	2115800348	225
64	SO22073-2-064	2115800348	223	89	SO22073-2-089	2115800348	226
65	SO22073-2-065	2115800348	223	90	SO22073-2-090	2115800348	226
66	SO22073-2-066	2115800348	223	91	SO22073-2-091	2115800348	226
67	SO22073-2-067	2115800348	223	92	SO22073-2-092	2115800348	226
68	SO22073-2-068	2115800348	223	93	SO22073-2-093	2115800348	228
69	SO22073-2-069	2115800348	223	94	SO22073-2-094	2115800348	228
70	SO22073-2-070	2115800348	223	95	SO22073-2-095	2115800348	228
71	SO22073-2-071	2115800348	223	96	SO22073-2-096	2115800348	228
72	SO22073-2-072	2115800348	223	97	SO22073-2-097	2115800348	228
73	SO22073-2-073	2115800348	224	98	SO22073-2-098	2115800348	228
74	SO22073-2-074	2115800348	224	99	SO22073-2-099	2115800348	228
75	SO22073-2-075	2115800348	224	100	SO22073-2-100	2115800348	228

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.17

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.17		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2206-H53		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	150		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
101	SO22073-2-101	2115800348	228	126	SO22073-2-126	2115800348	232				
102	SO22073-2-102	2115800348	228	127	SO22073-2-127	2115800348	232				
103	SO22073-2-103	2115800348	229	128	SO22073-2-128	2115800348	232				
104	SO22073-2-104	2115800348	229	129	SO22073-2-129	2115800348	232				
105	SO22073-2-105	2115800348	229	130	SO22073-2-130	2115800348	232				
106	SO22073-2-106	2115800348	229	131	SO22073-2-131	2115800348	232				
107	SO22073-2-107	2115800348	229	132	SO22073-2-132	2115800348	232				
108	SO22073-2-108	2115800348	229	133	SO22073-2-133	2115800348	232				
109	SO22073-2-109	2115800348	229	134	SO22073-2-134	2115800348	232				
110	SO22073-2-110	2115800348	229	135	SO22073-2-135	2115800348	234				
111	SO22073-2-111	2115800348	230	136	SO22073-2-136	2115800348	234				
112	SO22073-2-112	2115800348	230	137	SO22073-2-137	2115800348	234				
113	SO22073-2-113	2115800348	230	138	SO22073-2-138	2115800348	234				
114	SO22073-2-114	2115800348	230	139	SO22073-2-139	2115800348	234				
115	SO22073-2-115	2115800348	230	140	SO22073-2-140	2115800348	234				
116	SO22073-2-116	2115800348	230	141	SO22073-2-141	2115800348	234				
117	SO22073-2-117	2115800348	230	142	SO22073-2-142	2115800348	234				
118	SO22073-2-118	2115800348	230	143	SO22073-2-143	2115800348	234				
119	SO22073-2-119	2115800348	230	144	SO22073-2-144	2115800348	234				
120	SO22073-2-120	2115800348	230	145	SO22073-2-145	2115800348	234				
121	SO22073-2-121	2115800348	230	146	SO22073-2-146	2115800348	234				
122	SO22073-2-122	2115800348	231	147	SO22073-2-147	2115800348	234				
123	SO22073-2-123	2115800348	231	148	SO22073-2-148	2115800348	234				
124	SO22073-2-124	2115800348	232	149	SO22073-2-149	2115800348	234				
125	SO22073-2-125	2115800348	232	150	SO22073-2-150	2115800348	234				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Ji LIN	Approved by:	Ji WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.6.17	

DRAWING # B05-378

REPORT INDEX

Purchase Order: 2022048

Quantity: 100PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (B05-378)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 5
2.3	Tungsten carbide spray report	Page - 7
2.4	Penetrate testing report	Page - 8

METALLURGICAL TEST CERTIFICATE

Customer:			Customer PO#:			Date:	2022.3.19
Drawing #:	B05-378	Specification:	API 6A/ASTM A370	API Monogram:	No	Report #:	SO-20220319-01
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3					Quantity:	100

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EAF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	610	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
121V-1193			0.112	0.375	0.528	0.002	0.025	0.134	0.037	0.017	11.50	/

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY (ft-lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2203018-01			610	720	23	66	224			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	710°C 5.5h AIR	Temper1:	710°C 5.5h AIR
Temper2:	680°C 5.5h AIR	Temper2:	680°C 5.5h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

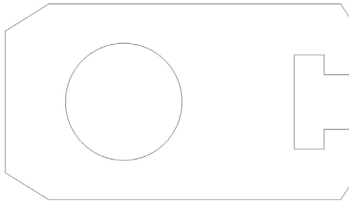
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.3.19	
Drawing #:	B05-378	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220319-01
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219

Sketch:



Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.3.19	
Drawing #:	B05-378	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220319-01
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235

Sketch:

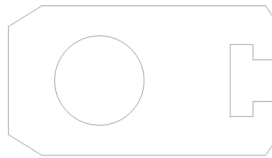
Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[✓] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.6.13
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206 -Q51	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:	DYE		
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:	10min		
Stage:	After fine finishing			Inspected surface:	Gate(body)			

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219

Sketch/Inspection Coverage:



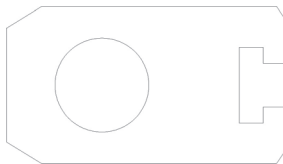
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.6.13	

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.6.13
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-Q51	
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC	
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3					Quantity:	100	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After fine finishing			Inspected surface:	Gate(body)			
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardne ss	
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221	
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222	
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223	
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211	
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231	
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216	
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226	
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222	
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213	
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216	
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225	
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217	
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225	
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219	
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218	
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218	
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216	
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228	
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219	
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226	
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217	
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217	
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217	
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235	
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.13

TUNGSTEN CARBIDE SPRAY REPORT

Customer:		Customer PO#:		Date:	2022.6.14
Drawing #:	B05-378	Specification :	API 6A	API Monogram:	No
Report #:	RS220614-01				
Part No.:		Material:	410 SS,Per NACE MR0175		Coating:
TC					Quantity:
Description: GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3					100
Dimension inspection					
ITEM	Hardness test		Bonding strength	Porosity	Coating type
Standard	≥1050		≥69MPa	MAX 1%	WC86-Co10-Cr4
Actual	1171		77	0.77	WC86-Co10-Cr4
Chemical component					
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)
standard	5.1-6.0	9.0-11.0	3.0-5.0		
Actual	5.40	9.70	3.89		
Evaluation & Disposition:			Found to be satisfactory		
Inspected by:			SHI LINGUI		
Approved by:			JI WEI		Date: 2022.6.14

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.16		
Drawing #:	B05-378	Specification	API Spec 6A/ASTM E165	API Monogram:	No		Report #:	NCS-2206-H51			
Part No.:		Material:	410 SS,Per NACE MR0175				Coating:	TC			
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3							Quantity:	100		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Gate(spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222				
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216				
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217				
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219				
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209				
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221				
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214				
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225				
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221				
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210				
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219				
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225				
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232				
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207				
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214				
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224				
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218				
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218				
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224				
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226				
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222				
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218				
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224				
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212				
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219				

Sketch/Inspection Coverage:



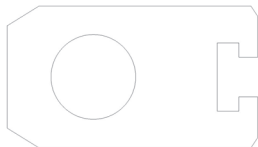
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:2022.6.16	

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.6.16
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-H51	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After coating tungsten carbide							
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221	
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222	
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223	
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211	
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231	
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216	
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226	
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222	
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213	
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216	
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225	
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217	
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225	
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219	
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218	
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218	
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216	
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228	
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219	
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226	
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217	
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217	
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217	
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235	
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.16

DRAWING # B05-378

REPORT INDEX

Purchase Order: 2022048

Quantity: 100PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (B05-378)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 5
2.3	Tungsten carbide spray report	Page - 7
2.4	Penetrate testing report	Page - 8

METALLURGICAL TEST CERTIFICATE

Customer:			Customer PO#:			Date:	2022.3.19
Drawing #:	B05-378	Specification:	API 6A/ASTM A370	API Monogram:	No	Report #:	SO-20220319-01
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3					Quantity:	100

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EAF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	610	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
121V-1193			0.112	0.375	0.528	0.002	0.025	0.134	0.037	0.017	11.50	/

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY (Jft-lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2203018-01			610	720	23	66	224			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	710°C 5.5h AIR	Temper1:	710°C 5.5h AIR
Temper2:	680°C 5.5h AIR	Temper2:	680°C 5.5h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.3.19
Drawing #:	B05-378	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220319-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222	
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216	
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217	
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219	
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209	
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221	
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214	
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225	
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221	
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210	
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219	
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225	
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232	
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207	
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214	
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224	
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218	
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218	
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224	
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226	
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222	
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218	
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224	
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212	
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219	

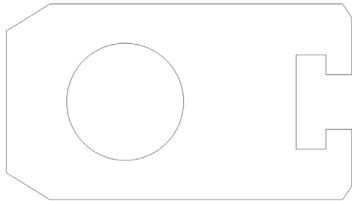
Sketch:

Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.3.19	
Drawing #:	B05-378	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220319-01
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235

Sketch:

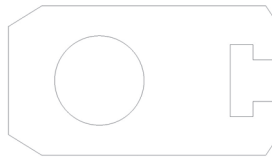


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[✓] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.13		
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165		API Monogram:	No		Report #:	NCS-2206 -Q51		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3							Quantity:	100		
Equipment:	DPT-8		Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE		
Penetrant Type:	Solvent		Penetration time:		15min	Developing time:			10min		
Stage:	After fine finishing				Inspected surface:	Gate(body)					
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222				
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216				
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217				
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219				
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209				
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221				
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214				
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225				
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221				
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210				
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219				
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225				
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232				
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207				
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214				
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224				
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218				
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218				
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224				
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226				
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222				
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218				
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224				
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212				
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219				

Sketch/Inspection Coverage:



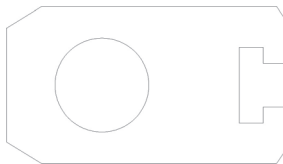
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.6.13	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.6.13	
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-Q51
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3					Quantity:	100
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min
Stage:	After fine finishing			Inspected surface:	Gate(body)		
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardne ss
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.13

TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.6.14
Drawing #:	B05-378	Specification :	API 6A	API Monogram:	No	Report #:	RS220614-01		
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC		
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3					Quantity:	100		
Dimension inspection									
ITEM	Hardness test		Bonding strength		Porosity		Coating type		
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4		
Actual	1171		77		0.77		WC86-Co10-Cr4		
Chemical component									
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)				
standard	5.1-6.0	9.0-11.0	3.0-5.0						
Actual	5.40	9.70	3.89						
Evaluation & Disposition:			Found to be satisfactory						
Inspected by:			SHI LINGUI						
Approved by:			JI WEI			Date:	2022.6.14		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.16		
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No			Report #:	NCS-2206-H51		
Part No.:		Material:	410 SS,Per NACE MR0175					Coating:	TC		
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3							Quantity:	100		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Gate(spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222				
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216				
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217				
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219				
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209				
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221				
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214				
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225				
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221				
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210				
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219				
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225				
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232				
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207				
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214				
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224				
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218				
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218				
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224				
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226				
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222				
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218				
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224				
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212				
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219				

Sketch/Inspection Coverage:



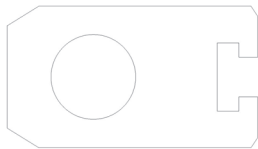
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:2022.6.16	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.6.16	
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-H51
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min
Stage:	After coating tungsten carbide						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.16

DRAWING # B05-378

REPORT INDEX

Purchase Order: 2022048

Quantity: 100PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (B05-378)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 5
2.3	Tungsten carbide spray report	Page - 7
2.4	Penetrate testing report	Page - 8

METALLURGICAL TEST CERTIFICATE

Customer:			Customer PO#:			Date:	2022.3.19
Drawing #:	B05-378	Specification:	API 6A/ASTM A370	API Monogram:	No	Report #:	SO-20220319-01
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3					Quantity:	100

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EAF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	610	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
121V-1193			0.112	0.375	0.528	0.002	0.025	0.134	0.037	0.017	11.50	/

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY (ft-lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2203018-01			610	720	23	66	224			

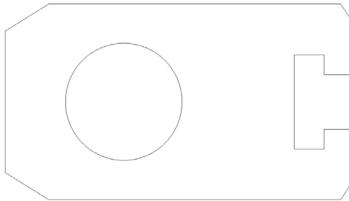
HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	710°C 5.5h AIR	Temper1:	710°C 5.5h AIR
Temper2:	680°C 5.5h AIR	Temper2:	680°C 5.5h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

*We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.*

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:				Customer PO#:				Date:	2022.3.19	
Drawing #:	B05-378	Specification:	API 6A/ASTM E10		API Monogram:	No		Report #:	SO-20220319-01	
Part No.:		Material:	410 SS,Per NACE MR0175					Coating:	TC	
Description	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3							Quantity:	100	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness			
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222			
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216			
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217			
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219			
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209			
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221			
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214			
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225			
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221			
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210			
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219			
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225			
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232			
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207			
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214			
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224			
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218			
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218			
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224			
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226			
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222			
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218			
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224			
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212			
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219			
Sketch: 										
Method Used:										
Acceptable Hardness(HBW):		207-235		Approved By:		Examined By:				
Judgments:		[☒] Conforms		JI WEI		Min Fukang				
		[] Does Not Conform								

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.3.19	
Drawing #:	B05-378	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220319-01
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235

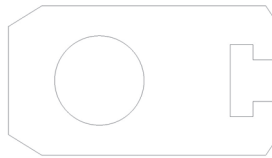
Sketch:

Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[✓] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.6.13
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206 -Q51	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After fine finishing			Inspected surface:	Gate(body)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222	
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216	
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217	
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219	
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209	
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221	
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214	
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225	
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221	
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210	
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219	
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225	
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232	
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207	
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214	
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224	
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218	
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218	
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224	
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226	
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222	
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218	
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224	
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212	
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219	

Sketch/Inspection Coverage:



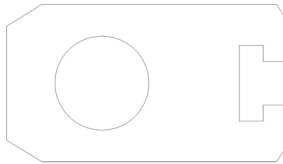
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.6.13	

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.6.13
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-Q51	
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC	
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3					Quantity:	100	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After fine finishing			Inspected surface:	Gate(body)			
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardne ss	
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221	
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222	
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223	
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211	
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231	
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216	
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226	
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222	
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213	
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216	
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225	
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217	
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225	
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219	
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218	
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218	
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216	
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228	
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219	
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226	
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217	
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217	
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217	
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235	
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.13

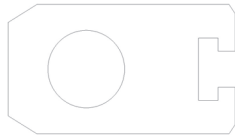
TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.6.14	
Drawing #:	B05-378	Specification :	API 6A	API Monogram:	No	Report #:	RS220614-01			
Part No.:		Material:	410 SS,Per NACE MR0175				Coating:	TC		
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3						Quantity:	100		
Dimension inspection										
ITEM	Hardness test		Bonding strength		Porosity		Coating type			
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4			
Actual	1171		77		0.77		WC86-Co10-Cr4			
Chemical component										
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)					
standard	5.1-6.0	9.0-11.0	3.0-5.0							
Actual	5.40	9.70	3.89							
Evaluation & Disposition:			Found to be satisfactory							
Inspected by:			SHI LINGUI							
Approved by:			JI WEI				Date:	2022.6.14		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.6.16		
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No			Report #:	NCS-220 6-H51		
Part No.:		Material:	410 SS,Per NACE MR0175					Coating:	TC		
Description:	GATE,5 1/8"15M,FLSR,410SS with T/C, EE,LU,PSL3							Quantity:	100		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Gate(spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22048-1-001	121V-1193	229	26	SO22048-1-026	121V-1193	222				
2	SO22048-1-002	121V-1193	219	27	SO22048-1-027	121V-1193	216				
3	SO22048-1-003	121V-1193	213	28	SO22048-1-028	121V-1193	217				
4	SO22048-1-004	121V-1193	217	29	SO22048-1-029	121V-1193	219				
5	SO22048-1-005	121V-1193	212	30	SO22048-1-030	121V-1193	209				
6	SO22048-1-006	121V-1193	223	31	SO22048-1-031	121V-1193	221				
7	SO22048-1-007	121V-1193	223	32	SO22048-1-032	121V-1193	214				
8	SO22048-1-008	121V-1193	228	33	SO22048-1-033	121V-1193	225				
9	SO22048-1-009	121V-1193	218	34	SO22048-1-034	121V-1193	221				
10	SO22048-1-010	121V-1193	230	35	SO22048-1-035	121V-1193	210				
11	SO22048-1-011	121V-1193	226	36	SO22048-1-036	121V-1193	219				
12	SO22048-1-012	121V-1193	218	37	SO22048-1-037	121V-1193	225				
13	SO22048-1-013	121V-1193	218	38	SO22048-1-038	121V-1193	232				
14	SO22048-1-014	121V-1193	223	39	SO22048-1-039	121V-1193	207				
15	SO22048-1-015	121V-1193	214	40	SO22048-1-040	121V-1193	214				
16	SO22048-1-016	121V-1193	217	41	SO22048-1-041	121V-1193	224				
17	SO22048-1-017	121V-1193	210	42	SO22048-1-042	121V-1193	218				
18	SO22048-1-018	121V-1193	213	43	SO22048-1-043	121V-1193	218				
19	SO22048-1-019	121V-1193	217	44	SO22048-1-044	121V-1193	224				
20	SO22048-1-020	121V-1193	219	45	SO22048-1-045	121V-1193	226				
21	SO22048-1-021	121V-1193	221	46	SO22048-1-046	121V-1193	222				
22	SO22048-1-022	121V-1193	223	47	SO22048-1-047	121V-1193	218				
23	SO22048-1-023	121V-1193	218	48	SO22048-1-048	121V-1193	224				
24	SO22048-1-024	121V-1193	218	49	SO22048-1-049	121V-1193	212				
25	SO22048-1-025	121V-1193	219	50	SO22048-1-050	121V-1193	219				

Sketch/Inspection Coverage:



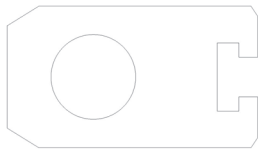
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:2022.6.16	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.6.16	
Drawing #:	B05-378	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2206-H51
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	GATE, 5 1/8" 15M, FLSR, 410SS with T/C, EE, LU, PSL3					Quantity:	100
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min
Stage:	After coating tungsten carbide						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22048-1-051	121V-1193	215	76	SO22048-1-076	121V-1193	221
52	SO22048-1-052	121V-1193	219	77	SO22048-1-077	121V-1193	222
53	SO22048-1-053	121V-1193	224	78	SO22048-1-078	121V-1193	223
54	SO22048-1-054	121V-1193	230	79	SO22048-1-079	121V-1193	211
55	SO22048-1-055	121V-1193	221	80	SO22048-1-080	121V-1193	231
56	SO22048-1-056	121V-1193	230	81	SO22048-1-081	121V-1193	216
57	SO22048-1-057	121V-1193	215	82	SO22048-1-082	121V-1193	226
58	SO22048-1-058	121V-1193	223	83	SO22048-1-083	121V-1193	222
59	SO22048-1-059	121V-1193	224	84	SO22048-1-084	121V-1193	213
60	SO22048-1-060	121V-1193	217	85	SO22048-1-085	121V-1193	216
61	SO22048-1-061	121V-1193	217	86	SO22048-1-086	121V-1193	225
62	SO22048-1-062	121V-1193	218	87	SO22048-1-087	121V-1193	217
63	SO22048-1-063	121V-1193	230	88	SO22048-1-088	121V-1193	225
64	SO22048-1-064	121V-1193	219	89	SO22048-1-089	121V-1193	219
65	SO22048-1-065	121V-1193	231	90	SO22048-1-090	121V-1193	218
66	SO22048-1-066	121V-1193	224	91	SO22048-1-091	121V-1193	218
67	SO22048-1-067	121V-1193	222	92	SO22048-1-092	121V-1193	216
68	SO22048-1-068	121V-1193	216	93	SO22048-1-093	121V-1193	228
69	SO22048-1-069	121V-1193	223	94	SO22048-1-094	121V-1193	219
70	SO22048-1-070	121V-1193	210	95	SO22048-1-095	121V-1193	226
71	SO22048-1-071	121V-1193	219	96	SO22048-1-096	121V-1193	217
72	SO22048-1-072	121V-1193	222	97	SO22048-1-097	121V-1193	217
73	SO22048-1-073	121V-1193	213	98	SO22048-1-098	121V-1193	217
74	SO22048-1-074	121V-1193	235	99	SO22048-1-099	121V-1193	235
75	SO22048-1-075	121V-1193	211	100	SO22048-1-100	121V-1193	235

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.6.16

B5323

REPORT INDEX

Purchase Order: LB18-150"CWI 643"

Quantity: 49

Shipment No.: 20180905-1

Shipment Date: 2018.09.05

Activity No.	Characteristics	Reference Page
1.1	Metallurgical Test Certificate	Page – 2
1.2	Mechanical Testing	Page – 2
1.3	Chemical Testing	Page – 2
1.4	Heat Treatment	Page – 2
2.1	Hardness Test	Page - 3~4
2.2	Ultrasonic Testing	Page - 5~6
2.3	Magnetic Particle Inspection Report	Page - 7~8

METALLURGICAL TEST CERTIFICATE

Customer:	SHLB	Customer PO#:	LB18-150"CWI 643"	Date:	2018.09.05
Drawing #:	B5323	Specification:	API SPEC 6A/ASTM A370	API Monogram:	Y/N
Part No.:	—	Material:	410 SS Per 86%WC/10%Co/4%Cr thickness: 0.008 +/- 0.003	Coating:	WC
Description:	GATE 7 1\16 15M			Quantity:	49

TEST CONDITION

Test Bar Size:	4"	Bar Diameter:	100 mm
Melt Practice:	VD	Reduction Ratio Min.:	4:1
Yield Stress:	505N/mm ²	Gauge Length:	6000

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			-	-	-	-	-	-	-	-	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	-	-	-	13.50	-
181-807			0.11	0.46	0.38	0.002	0.023	0.18	-	-	11.93	-

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY J(ft.lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			75	95	18.0	35.0	197	27J	-	-
Spec. Max			-	-	-	-	235	-	-	-
181-807			84	105	29	72	225	29	-	-

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	Austenitize	Normalized:	Austenitize
Quench:	1000°C	Quench:	1000°C
Temper:	700°C-660°C	Temper:	700°C-660°C
Quenchant:	Oil	Quenchant:	Oil
Start Temp.:	28°C	Start Temp.:	28°C
End Temp.:	45°C	End Temp.:	45°C

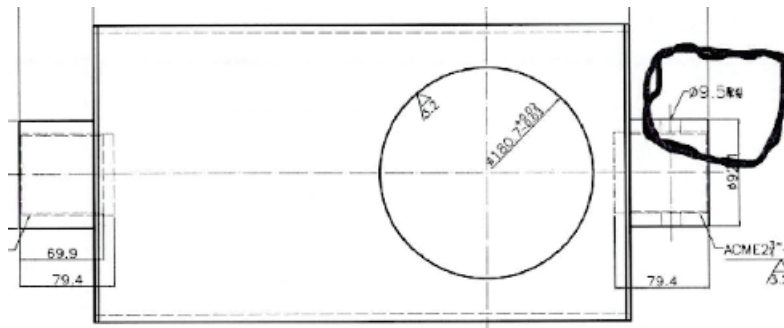
*We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.*

Inspected By:	Qian Huang	Approved By:	Bo Wang

HARDNESS TEST REPORT

Customer:	SHLB		Customer PO#:	LB18-150"CWI 643"		Date:	2018.09.05
Drawing #:	B5323	Specification:	API SPEC 6A/ASTM E10	API Monogram:	Y/N	Report #:	20180905-1
Part No.:	—	Material:	410 SS Per 86%WC/10%Co/4%Cr thickness: 0.008 +/- 0.003			Coating:	WC
Description:	GATE 7 1\16 15M					Quantity:	49
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SNPI011815001-1	181-807	HB 226	16	SNPI011815001-16	181-807	HB 227
2	SNPI011815001-2	181-807	HB 226	17	SNPI011815001-17	181-807	HB 230
3	SNPI011815001-3	181-807	HB 228	18	SNPI011815001-18	181-807	HB 223
4	SNPI011815001-4	181-807	HB 228	19	SNPI011815001-19	181-807	HB 226
5	SNPI011815001-5	181-807	HB 230	20	SNPI011815001-20	181-807	HB 229
6	SNPI011815001-6	181-807	HB 230	21	SNPI011815001-21	181-807	HB 222
7	SNPI011815001-7	181-807	HB 222	22	SNPI011815001-22	181-807	HB 225
8	SNPI011815001-8	181-807	HB 222	23	SNPI011815001-23	181-807	HB 228
9	SNPI011815001-9	181-807	HB 224	24	SNPI011815001-24	181-807	HB 221
10	SNPI011815001-10	181-807	HB 224	25	SNPI011815001-25	181-807	HB 224
11	SNPI011815001-11	181-807	HB 226	26	SNPI011815001-26	181-807	HB 227
12	SNPI011815001-12	181-807	HB 226	28	SNPI011815001-28	181-807	HB 221
13	SNPI011815001-13	181-807	HB 228	29	SNPI011815001-29	181-807	HB 223
14	SNPI011815001-14	181-807	HB 221	30	SNPI011815001-30	181-807	HB 225
15	SNPI011815001-15	181-807	HB 224	31	SNPI011815001-31	181-807	HB 227

Sketch:

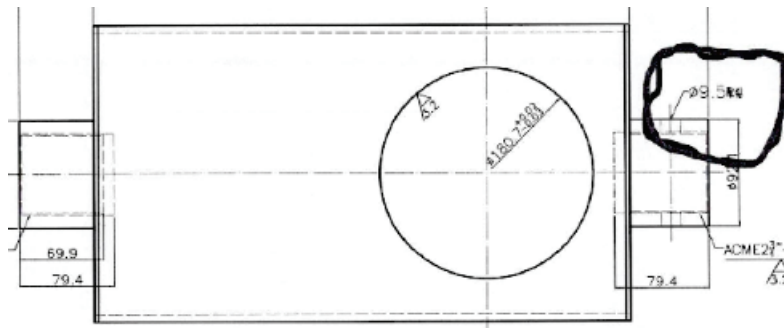


Method Used:	HBW : D10 mm/ 3000kgf / 15s		
Acceptable Hardness:	HB197-235	Approved By:	Examined By:
Judgments:	[✓] Conforms	Bo Wang	Guoyin Sheng
	[] Does Not Conform		

HARDNESS TEST REPORT

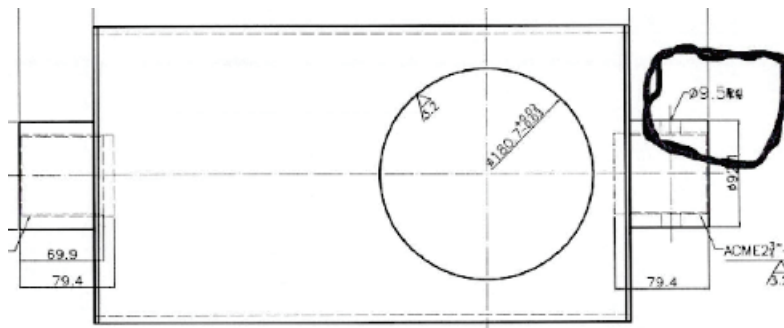
Customer:	SHLB		Customer PO#:	LB18-150"CWI 643"		Date:	2018.09.05
Drawing #:	B5323	Specification:	API SPEC 6A/ASTM E10	API Monogram:	Y/N	Report #:	20180905-1
Part No.:	—	Material:	410 SS Per 86%WC/10%Co/4%Cr thickness: 0.008 +/- 0.003				
Description:	GATE 7 1\16 15M					Quantity:	49
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
32	SNPI011815001-32	181-807	HB 229	47	SNPI011815001-47	181-807	HB 223
33	SNPI011815001-33	181-807	HB 221	48	SNPI011815001-48	181-807	HB 225
34	SNPI011815001-34	181-807	HB 223	49	SNPI011815001-49	181-807	HB 227
35	SNPI011815001-35	181-807	HB 225	50	SNPI011815001-50	181-807	HB 229
36	SNPI011815001-36	181-807	HB 227				
37	SNPI011815001-37	181-807	HB 229				
38	SNPI011815001-38	181-807	HB 227				
39	SNPI011815001-39	181-807	HB 230				
40	SNPI011815001-40	181-807	HB 223				
41	SNPI011815001-41	181-807	HB 226				
42	SNPI011815001-42	181-807	HB 229				
43	SNPI011815001-43	181-807	HB 222				
44	SNPI011815001-44	181-807	HB 227				
45	SNPI011815001-45	181-807	HB 229				
46	SNPI011815001-46	181-807	HB 221				

Sketch:



Method Used:	HBW : D10 mm/ 3000kgf / 15s		
Acceptable Hardness:	HB197-235	Approved By:	Examined By:
Judgments:	[✓] Conforms	Bo Wang	Guoyin Sheng
	[] Does Not Conform		

Sketch:

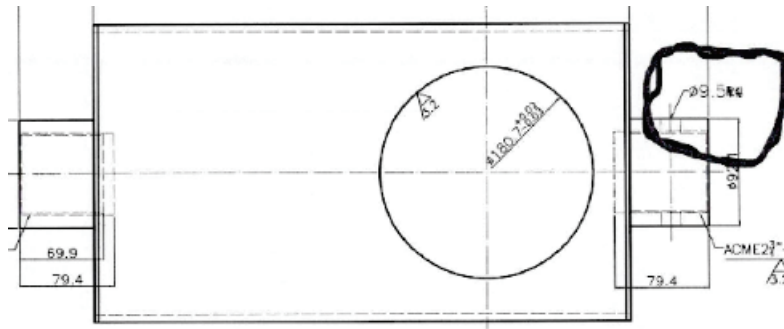


UT Code:	L-001	Technique:	Straight/Contact	Examined By:	Chenyang Pan
Exam. Stage:	24h	Calibration Date:	2017-05-11	Level as per UT:	Level II
Equipment:	TOPSONIC TS-V6e	Due Date:	2018-05-10	Couplant:	Machine oil
Probe Used:	2.5P20	Acceptance Criteria:	API 6A PSL3 EE LU	Approved by:	—
Instrmt/Ident.#:	V08035	Test Gain:	6db	Level as per UT:	—

ULTRASONIC EXAMINATION REPORT

Customer:	SHLB		Customer PO#:	LB18-150"CWI 643"		Date:	2018.09.05
Drawing #:	B5323	Specification:	API SPEC 6A/ASTM A388	API Monogram:	Y/N	Report #:	20180905-1
Part No.:	—	Material:	410 SS Per 86%WC/10%Co/4%Cr thickness: 0.008 +/- 0.003				
Description:	GATE 7 1\16 15M					Quantity:	49
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
32	SNPI011815001-32	181-807	HB 229	47	SNPI011815001-47	181-807	HB 223
33	SNPI011815001-33	181-807	HB 221	48	SNPI011815001-48	181-807	HB 225
34	SNPI011815001-34	181-807	HB 223	49	SNPI011815001-49	181-807	HB 227
35	SNPI011815001-35	181-807	HB 225	50	SNPI011815001-50	181-807	HB 229
36	SNPI011815001-36	181-807	HB 227				
37	SNPI011815001-37	181-807	HB 229				
38	SNPI011815001-38	181-807	HB 227				
39	SNPI011815001-39	181-807	HB 230				
40	SNPI011815001-40	181-807	HB 223				
41	SNPI011815001-41	181-807	HB 226				
42	SNPI011815001-42	181-807	HB 229				
43	SNPI011815001-43	181-807	HB 222				
44	SNPI011815001-44	181-807	HB 227				
45	SNPI011815001-45	181-807	HB 229				
46	SNPI011815001-46	181-807	HB 221				

Sketch:



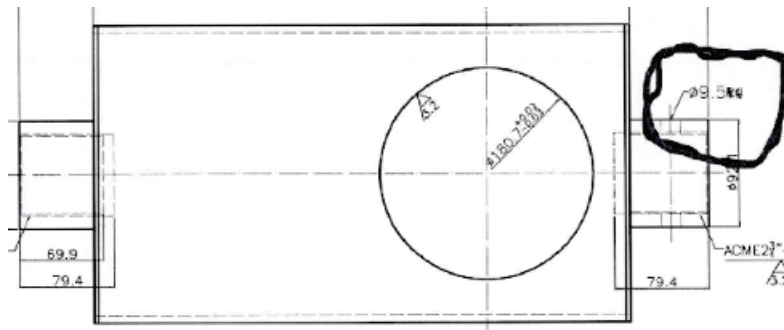
**ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:	L-001	Technique:	Straight/Contact	Examined By:	Chenyang Pan
Exam. Stage:	24h	Calibration Date:	2017-05-11	Level as per UT:	Level II
Equipment:	TOPSONIC TS-V6e	Due Date:	2018-05-10	Couplant:	Machine oil
Probe Used:	2.5P20	Acceptance Criteria:	API 6A PSL3 EE LU	Approved by:	—
Instrmt/Ident.#:	V08035	Test Gain:	6db	Level as per UT:	—

MAGNETIC PARTICLE INSPECTION REPORT

Customer:	SHLB		Customer PO#:	LB18-150"CWI 643"		Date:	2018.09.05
Drawing #:	B5323	Specification:	API SPEC 6A/ASTM E709	API Monogram:	Y/N	Report #:	20180905-1
Part No.:	—	Material:	410 SS Per 86%WC/10%Co/4%Cr thickness: 0.008 +/- 0.003				
Description:	GATE 7 1\16 15M					Quantity:	49
Equipment:	Cy-1000	Acceptance Criteria:		API 6A/PSL3	Circular AMPS:		1000A
Test Method:	Wet Fluorescent	Particle Type:		fluorescent	UV-Light Intensity:		12900uw/cm²
Stage:	As ground	Concentration:		0.1-0.4	Magnetizing Time:		1-2s
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SNPI011815001-1	181-807	HB 226	16	SNPI011815001-16	181-807	HB 227
2	SNPI011815001-2	181-807	HB 226	17	SNPI011815001-17	181-807	HB 230
3	SNPI011815001-3	181-807	HB 228	18	SNPI011815001-18	181-807	HB 223
4	SNPI011815001-4	181-807	HB 228	19	SNPI011815001-19	181-807	HB 226
5	SNPI011815001-5	181-807	HB 230	20	SNPI011815001-20	181-807	HB 229
6	SNPI011815001-6	181-807	HB 230	21	SNPI011815001-21	181-807	HB 222
7	SNPI011815001-7	181-807	HB 222	22	SNPI011815001-22	181-807	HB 225
8	SNPI011815001-8	181-807	HB 222	23	SNPI011815001-23	181-807	HB 228
9	SNPI011815001-9	181-807	HB 224	24	SNPI011815001-24	181-807	HB 221
10	SNPI011815001-10	181-807	HB 224	25	SNPI011815001-25	181-807	HB 224
11	SNPI011815001-11	181-807	HB 226	26	SNPI011815001-26	181-807	HB 227
12	SNPI011815001-12	181-807	HB 226	28	SNPI011815001-28	181-807	HB 221
13	SNPI011815001-13	181-807	HB 228	29	SNPI011815001-29	181-807	HB 223
14	SNPI011815001-14	181-807	HB 221	30	SNPI011815001-30	181-807	HB 225
15	SNPI011815001-15	181-807	HB 224	31	SNPI011815001-31	181-807	HB 227

Sketch/Inspection Coverage:



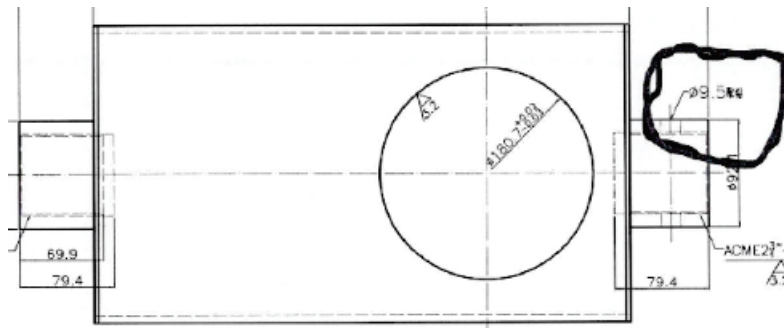
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Chenyang Pan	Inspected by:	Chenyang Pan
Approved by:	—	Approved by:	—
NDT Level:	Level II	NDT Level:	Level II

MAGNETIC PARTICLE INSPECTION REPORT

Customer:	SHLB		Customer PO#:		LB18-150"CWI 643"		Date:	2018.09.05
Drawing #:	B5323	Specification:	API SPEC 6A/ASTM E709		API Monogram:	Y/N	Report #:	20180905-1
Part No.:	—	Material:	410 SS Per 86%WC/10%Co/4%Cr thickness: 0.008 +/- 0.003					
Description:	GATE 7 1\16 15M						Quantity:	49
Equipment:	Cy-1000	Acceptance Criteria:		API 6A/PSL3	Circular AMPS:		1000A	
Test Method:	Wet Fluorescent	Particle Type:		fluorescent	UV-Light Intensity:		12900uw/cm²	
Stage:	As ground	Concentration:		0.1-0.4	Magnetizing Time:		1-2s	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
32	SNPI011815001-32	181-807	HB 229	47	SNPI011815001-47	181-807	HB 223	
33	SNPI011815001-33	181-807	HB 221	48	SNPI011815001-48	181-807	HB 225	
34	SNPI011815001-34	181-807	HB 223	49	SNPI011815001-49	181-807	HB 227	
35	SNPI011815001-35	181-807	HB 225	50	SNPI011815001-50	181-807	HB 229	
36	SNPI011815001-36	181-807	HB 227					
37	SNPI011815001-37	181-807	HB 229					
38	SNPI011815001-38	181-807	HB 227					
39	SNPI011815001-39	181-807	HB 230					
40	SNPI011815001-40	181-807	HB 223					
41	SNPI011815001-41	181-807	HB 226					
42	SNPI011815001-42	181-807	HB 229					
43	SNPI011815001-43	181-807	HB 222					
44	SNPI011815001-44	181-807	HB 227					
45	SNPI011815001-45	181-807	HB 229					
46	SNPI011815001-46	181-807	HB 221					

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Chenyang Pan	Inspected by:	Chenyang Pan
Approved by:	—	Approved by:	—
NDT Level:	Level II	NDT Level:	Level II

DRAWING # X-111188-01

REPORT INDEX

Purchase Order: 2022086

Quantity: 200PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (X-111188-01)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 7
2.3	Tungsten carbide spray report	Page - 11
2.4	Penetrate testing report	Page - 12

METALLURGICAL TEST CERTIFICATE

Customer:			Customer PO#:			Date:	2022.5.14
Drawing #:	X-111188-01	Specification:	API 6A/ASTM A370	API Monogram:	No	Report #:	SO-20220514-01
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	200

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	580	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
2115800348			0.10	0.37	0.34	0.006	0.019	0.12	/	0.01	11.62	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY (ft-lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2205013-01			580	700	24	67	226			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	720°C 5.5h AIR	Temper1:	720°C 5.5h AIR
Temper2:	680°C 5.5h AIR	Temper2:	680°C 5.5h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

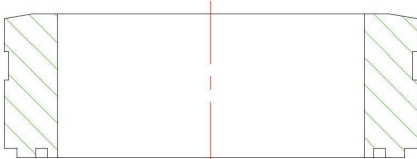
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.14
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220514-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	200	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness	
1	SO22086-1-001	2115800348	207	26	SO22086-1-026	2115800348	210	
2	SO22086-1-002	2115800348	207	27	SO22086-1-027	2115800348	210	
3	SO22086-1-003	2115800348	207	28	SO22086-1-028	2115800348	210	
4	SO22086-1-004	2115800348	207	29	SO22086-1-029	2115800348	210	
5	SO22086-1-005	2115800348	207	30	SO22086-1-030	2115800348	210	
6	SO22086-1-006	2115800348	207	31	SO22086-1-031	2115800348	211	
7	SO22086-1-007	2115800348	207	32	SO22086-1-032	2115800348	211	
8	SO22086-1-008	2115800348	207	33	SO22086-1-033	2115800348	211	
9	SO22086-1-009	2115800348	208	34	SO22086-1-034	2115800348	211	
10	SO22086-1-010	2115800348	208	35	SO22086-1-035	2115800348	211	
11	SO22086-1-011	2115800348	208	36	SO22086-1-036	2115800348	211	
12	SO22086-1-012	2115800348	208	37	SO22086-1-037	2115800348	211	
13	SO22086-1-013	2115800348	208	38	SO22086-1-038	2115800348	211	
14	SO22086-1-014	2115800348	208	39	SO22086-1-039	2115800348	211	
15	SO22086-1-015	2115800348	208	40	SO22086-1-040	2115800348	211	
16	SO22086-1-016	2115800348	208	41	SO22086-1-041	2115800348	211	
17	SO22086-1-017	2115800348	209	42	SO22086-1-042	2115800348	211	
18	SO22086-1-018	2115800348	209	43	SO22086-1-043	2115800348	211	
19	SO22086-1-019	2115800348	209	44	SO22086-1-044	2115800348	211	
20	SO22086-1-020	2115800348	209	45	SO22086-1-045	2115800348	211	
21	SO22086-1-021	2115800348	210	46	SO22086-1-046	2115800348	212	
22	SO22086-1-022	2115800348	210	47	SO22086-1-047	2115800348	212	
23	SO22086-1-023	2115800348	210	48	SO22086-1-048	2115800348	212	
24	SO22086-1-024	2115800348	210	49	SO22086-1-049	2115800348	212	
25	SO22086-1-025	2115800348	210	50	SO22086-1-050	2115800348	212	

Sketch:



Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.14	
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10		API Monogram:	No	Report #:	SO-20220514-01	
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	200	

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
51	SO22086-1-051	2115800348	212	76	SO22086-1-076	2115800348	216
52	SO22086-1-052	2115800348	212	77	SO22086-1-077	2115800348	216
53	SO22086-1-053	2115800348	212	78	SO22086-1-078	2115800348	216
54	SO22086-1-054	2115800348	213	79	SO22086-1-079	2115800348	216
55	SO22086-1-055	2115800348	213	80	SO22086-1-080	2115800348	216
56	SO22086-1-056	2115800348	213	81	SO22086-1-081	2115800348	217
57	SO22086-1-057	2115800348	213	82	SO22086-1-082	2115800348	217
58	SO22086-1-058	2115800348	214	83	SO22086-1-083	2115800348	217
59	SO22086-1-059	2115800348	214	84	SO22086-1-084	2115800348	217
60	SO22086-1-060	2115800348	214	85	SO22086-1-085	2115800348	218
61	SO22086-1-061	2115800348	214	86	SO22086-1-086	2115800348	218
62	SO22086-1-062	2115800348	214	87	SO22086-1-087	2115800348	218
63	SO22086-1-063	2115800348	214	88	SO22086-1-088	2115800348	218
64	SO22086-1-064	2115800348	214	89	SO22086-1-089	2115800348	218
65	SO22086-1-065	2115800348	214	90	SO22086-1-090	2115800348	218
66	SO22086-1-066	2115800348	214	91	SO22086-1-091	2115800348	219
67	SO22086-1-067	2115800348	215	92	SO22086-1-092	2115800348	219
68	SO22086-1-068	2115800348	215	93	SO22086-1-093	2115800348	219
69	SO22086-1-069	2115800348	215	94	SO22086-1-094	2115800348	219
70	SO22086-1-070	2115800348	215	95	SO22086-1-095	2115800348	220
71	SO22086-1-071	2115800348	215	96	SO22086-1-096	2115800348	220
72	SO22086-1-072	2115800348	215	97	SO22086-1-097	2115800348	220
73	SO22086-1-073	2115800348	216	98	SO22086-1-098	2115800348	220
74	SO22086-1-074	2115800348	216	99	SO22086-1-099	2115800348	220
75	SO22086-1-075	2115800348	216	100	SO22086-1-100	2115800348	220

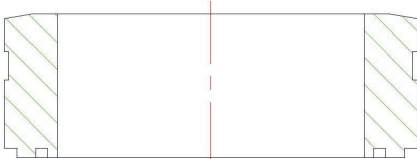
Sketch:

Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.14	
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10		API Monogram:	No	Report #:	SO-20220514-01	
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	200	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness		
101	SO22086-1-101	2115800348	221	126	SO22086-1-126	2115800348	225		
102	SO22086-1-102	2115800348	221	127	SO22086-1-127	2115800348	226		
103	SO22086-1-103	2115800348	221	128	SO22086-1-128	2115800348	226		
104	SO22086-1-104	2115800348	222	129	SO22086-1-129	2115800348	226		
105	SO22086-1-105	2115800348	222	130	SO22086-1-130	2115800348	226		
106	SO22086-1-106	2115800348	222	131	SO22086-1-131	2115800348	228		
107	SO22086-1-107	2115800348	222	132	SO22086-1-132	2115800348	228		
108	SO22086-1-108	2115800348	222	133	SO22086-1-133	2115800348	228		
109	SO22086-1-109	2115800348	222	134	SO22086-1-134	2115800348	228		
110	SO22086-1-110	2115800348	223	135	SO22086-1-135	2115800348	228		
111	SO22086-1-111	2115800348	223	136	SO22086-1-136	2115800348	228		
112	SO22086-1-112	2115800348	223	137	SO22086-1-137	2115800348	228		
113	SO22086-1-113	2115800348	223	138	SO22086-1-138	2115800348	228		
114	SO22086-1-114	2115800348	223	139	SO22086-1-139	2115800348	229		
115	SO22086-1-115	2115800348	224	140	SO22086-1-140	2115800348	229		
116	SO22086-1-116	2115800348	224	141	SO22086-1-141	2115800348	229		
117	SO22086-1-117	2115800348	224	142	SO22086-1-142	2115800348	229		
118	SO22086-1-118	2115800348	224	143	SO22086-1-143	2115800348	229		
119	SO22086-1-119	2115800348	224	144	SO22086-1-144	2115800348	229		
120	SO22086-1-120	2115800348	224	145	SO22086-1-145	2115800348	229		
121	SO22086-1-121	2115800348	225	146	SO22086-1-146	2115800348	229		
122	SO22086-1-122	2115800348	225	147	SO22086-1-147	2115800348	230		
123	SO22086-1-123	2115800348	225	148	SO22086-1-148	2115800348	230		
124	SO22086-1-124	2115800348	225	149	SO22086-1-149	2115800348	230		
125	SO22086-1-125	2115800348	225	150	SO22086-1-150	2115800348	230		

Sketch:



Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.14
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220514-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	200	

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
151	SO22086-1-151	2115800348	230	176	SO22086-1-176	2115800348	235
152	SO22086-1-152	2115800348	230	177	SO22086-1-177	2115800348	208
153	SO22086-1-153	2115800348	231	178	SO22086-1-178	2115800348	208
154	SO22086-1-154	2115800348	231	179	SO22086-1-179	2115800348	208
155	SO22086-1-155	2115800348	231	180	SO22086-1-180	2115800348	208
156	SO22086-1-156	2115800348	231	181	SO22086-1-181	2115800348	210
157	SO22086-1-157	2115800348	231	182	SO22086-1-182	2115800348	210
158	SO22086-1-158	2115800348	231	183	SO22086-1-183	2115800348	210
159	SO22086-1-159	2115800348	231	184	SO22086-1-184	2115800348	210
160	SO22086-1-160	2115800348	231	185	SO22086-1-185	2115800348	210
161	SO22086-1-161	2115800348	232	186	SO22086-1-186	2115800348	210
162	SO22086-1-162	2115800348	232	187	SO22086-1-187	2115800348	211
163	SO22086-1-163	2115800348	232	188	SO22086-1-188	2115800348	211
164	SO22086-1-164	2115800348	232	189	SO22086-1-189	2115800348	211
165	SO22086-1-165	2115800348	232	190	SO22086-1-190	2115800348	211
166	SO22086-1-166	2115800348	234	191	SO22086-1-191	2115800348	211
167	SO22086-1-167	2115800348	234	192	SO22086-1-192	2115800348	211
168	SO22086-1-168	2115800348	234	193	SO22086-1-193	2115800348	211
169	SO22086-1-169	2115800348	234	194	SO22086-1-194	2115800348	211
170	SO22086-1-170	2115800348	234	195	SO22086-1-195	2115800348	212
171	SO22086-1-171	2115800348	234	196	SO22086-1-196	2115800348	212
172	SO22086-1-172	2115800348	235	197	SO22086-1-197	2115800348	212
173	SO22086-1-173	2115800348	235	198	SO22086-1-198	2115800348	212
174	SO22086-1-174	2115800348	235	199	SO22086-1-199	2115800348	212
175	SO22086-1-175	2115800348	235	200	SO22086-1-200	2115800348	212

Sketch:

Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.7.8
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2207-Q25	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After fine finishing			Inspected surface:	Seat (body)			

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22086-1-001	2115800348	207	26	SO22086-1-026	2115800348	210
2	SO22086-1-002	2115800348	207	27	SO22086-1-027	2115800348	210
3	SO22086-1-003	2115800348	207	28	SO22086-1-028	2115800348	210
4	SO22086-1-004	2115800348	207	29	SO22086-1-029	2115800348	210
5	SO22086-1-005	2115800348	207	30	SO22086-1-030	2115800348	210
6	SO22086-1-006	2115800348	207	31	SO22086-1-031	2115800348	211
7	SO22086-1-007	2115800348	207	32	SO22086-1-032	2115800348	211
8	SO22086-1-008	2115800348	207	33	SO22086-1-033	2115800348	211
9	SO22086-1-009	2115800348	208	34	SO22086-1-034	2115800348	211
10	SO22086-1-010	2115800348	208	35	SO22086-1-035	2115800348	211
11	SO22086-1-011	2115800348	208	36	SO22086-1-036	2115800348	211
12	SO22086-1-012	2115800348	208	37	SO22086-1-037	2115800348	211
13	SO22086-1-013	2115800348	208	38	SO22086-1-038	2115800348	211
14	SO22086-1-014	2115800348	208	39	SO22086-1-039	2115800348	211
15	SO22086-1-015	2115800348	208	40	SO22086-1-040	2115800348	211
16	SO22086-1-016	2115800348	208	41	SO22086-1-041	2115800348	211
17	SO22086-1-017	2115800348	209	42	SO22086-1-042	2115800348	211
18	SO22086-1-018	2115800348	209	43	SO22086-1-043	2115800348	211
19	SO22086-1-019	2115800348	209	44	SO22086-1-044	2115800348	211
20	SO22086-1-020	2115800348	209	45	SO22086-1-045	2115800348	211
21	SO22086-1-021	2115800348	210	46	SO22086-1-046	2115800348	212
22	SO22086-1-022	2115800348	210	47	SO22086-1-047	2115800348	212
23	SO22086-1-023	2115800348	210	48	SO22086-1-048	2115800348	212
24	SO22086-1-024	2115800348	210	49	SO22086-1-049	2115800348	212
25	SO22086-1-025	2115800348	210	50	SO22086-1-050	2115800348	212

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.7.8

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.7.8
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2207-Q25	
Part No.:	Material:		410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)			

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
51	SO22086-1-051	2115800348	212	76	SO22086-1-076	2115800348	216
52	SO22086-1-052	2115800348	212	77	SO22086-1-077	2115800348	216
53	SO22086-1-053	2115800348	212	78	SO22086-1-078	2115800348	216
54	SO22086-1-054	2115800348	213	79	SO22086-1-079	2115800348	216
55	SO22086-1-055	2115800348	213	80	SO22086-1-080	2115800348	216
56	SO22086-1-056	2115800348	213	81	SO22086-1-081	2115800348	217
57	SO22086-1-057	2115800348	213	82	SO22086-1-082	2115800348	217
58	SO22086-1-058	2115800348	214	83	SO22086-1-083	2115800348	217
59	SO22086-1-059	2115800348	214	84	SO22086-1-084	2115800348	217
60	SO22086-1-060	2115800348	214	85	SO22086-1-085	2115800348	218
61	SO22086-1-061	2115800348	214	86	SO22086-1-086	2115800348	218
62	SO22086-1-062	2115800348	214	87	SO22086-1-087	2115800348	218
63	SO22086-1-063	2115800348	214	88	SO22086-1-088	2115800348	218
64	SO22086-1-064	2115800348	214	89	SO22086-1-089	2115800348	218
65	SO22086-1-065	2115800348	214	90	SO22086-1-090	2115800348	218
66	SO22086-1-066	2115800348	214	91	SO22086-1-091	2115800348	219
67	SO22086-1-067	2115800348	215	92	SO22086-1-092	2115800348	219
68	SO22086-1-068	2115800348	215	93	SO22086-1-093	2115800348	219
69	SO22086-1-069	2115800348	215	94	SO22086-1-094	2115800348	219
70	SO22086-1-070	2115800348	215	95	SO22086-1-095	2115800348	220
71	SO22086-1-071	2115800348	215	96	SO22086-1-096	2115800348	220
72	SO22086-1-072	2115800348	215	97	SO22086-1-097	2115800348	220
73	SO22086-1-073	2115800348	216	98	SO22086-1-098	2115800348	220
74	SO22086-1-074	2115800348	216	99	SO22086-1-099	2115800348	220
75	SO22086-1-075	2115800348	216	100	SO22086-1-100	2115800348	220

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.7.8

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.7.8		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No		Report #:	NCS-2207-Q25			
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC			
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	200			
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
101	SO22086-1-101	2115800348	221	126	SO22086-1-126	2115800348	225				
102	SO22086-1-102	2115800348	221	127	SO22086-1-127	2115800348	226				
103	SO22086-1-103	2115800348	221	128	SO22086-1-128	2115800348	226				
104	SO22086-1-104	2115800348	222	129	SO22086-1-129	2115800348	226				
105	SO22086-1-105	2115800348	222	130	SO22086-1-130	2115800348	226				
106	SO22086-1-106	2115800348	222	131	SO22086-1-131	2115800348	228				
107	SO22086-1-107	2115800348	222	132	SO22086-1-132	2115800348	228				
108	SO22086-1-108	2115800348	222	133	SO22086-1-133	2115800348	228				
109	SO22086-1-109	2115800348	222	134	SO22086-1-134	2115800348	228				
110	SO22086-1-110	2115800348	223	135	SO22086-1-135	2115800348	228				
111	SO22086-1-111	2115800348	223	136	SO22086-1-136	2115800348	228				
112	SO22086-1-112	2115800348	223	137	SO22086-1-137	2115800348	228				
113	SO22086-1-113	2115800348	223	138	SO22086-1-138	2115800348	228				
114	SO22086-1-114	2115800348	223	139	SO22086-1-139	2115800348	229				
115	SO22086-1-115	2115800348	224	140	SO22086-1-140	2115800348	229				
116	SO22086-1-116	2115800348	224	141	SO22086-1-141	2115800348	229				
117	SO22086-1-117	2115800348	224	142	SO22086-1-142	2115800348	229				
118	SO22086-1-118	2115800348	224	143	SO22086-1-143	2115800348	229				
119	SO22086-1-119	2115800348	224	144	SO22086-1-144	2115800348	229				
120	SO22086-1-120	2115800348	224	145	SO22086-1-145	2115800348	229				
121	SO22086-1-121	2115800348	225	146	SO22086-1-146	2115800348	229				
122	SO22086-1-122	2115800348	225	147	SO22086-1-147	2115800348	230				
123	SO22086-1-123	2115800348	225	148	SO22086-1-148	2115800348	230				
124	SO22086-1-124	2115800348	225	149	SO22086-1-149	2115800348	230				
125	SO22086-1-125	2115800348	225	150	SO22086-1-150	2115800348	230				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.7.8	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.7.8	
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2207-Q25
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min
Stage:	After fine finishing			Inspected surface:	Seat (body)		

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
151	SO22086-1-151	2115800348	230	176	SO22086-1-176	2115800348	235
152	SO22086-1-152	2115800348	230	177	SO22086-1-177	2115800348	208
153	SO22086-1-153	2115800348	231	178	SO22086-1-178	2115800348	208
154	SO22086-1-154	2115800348	231	179	SO22086-1-179	2115800348	208
155	SO22086-1-155	2115800348	231	180	SO22086-1-180	2115800348	208
156	SO22086-1-156	2115800348	231	181	SO22086-1-181	2115800348	210
157	SO22086-1-157	2115800348	231	182	SO22086-1-182	2115800348	210
158	SO22086-1-158	2115800348	231	183	SO22086-1-183	2115800348	210
159	SO22086-1-159	2115800348	231	184	SO22086-1-184	2115800348	210
160	SO22086-1-160	2115800348	231	185	SO22086-1-185	2115800348	210
161	SO22086-1-161	2115800348	232	186	SO22086-1-186	2115800348	210
162	SO22086-1-162	2115800348	232	187	SO22086-1-187	2115800348	211
163	SO22086-1-163	2115800348	232	188	SO22086-1-188	2115800348	211
164	SO22086-1-164	2115800348	232	189	SO22086-1-189	2115800348	211
165	SO22086-1-165	2115800348	232	190	SO22086-1-190	2115800348	211
166	SO22086-1-166	2115800348	234	191	SO22086-1-191	2115800348	211
167	SO22086-1-167	2115800348	234	192	SO22086-1-192	2115800348	211
168	SO22086-1-168	2115800348	234	193	SO22086-1-193	2115800348	211
169	SO22086-1-169	2115800348	234	194	SO22086-1-194	2115800348	211
170	SO22086-1-170	2115800348	234	195	SO22086-1-195	2115800348	212
171	SO22086-1-171	2115800348	234	196	SO22086-1-196	2115800348	212
172	SO22086-1-172	2115800348	235	197	SO22086-1-197	2115800348	212
173	SO22086-1-173	2115800348	235	198	SO22086-1-198	2115800348	212
174	SO22086-1-174	2115800348	235	199	SO22086-1-199	2115800348	212
175	SO22086-1-175	2115800348	235	200	SO22086-1-200	2115800348	212

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.7.8

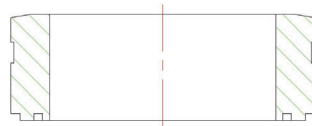
TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.7.10	
Drawing #:	X-111188-01	Specification :	API 6A	API Monogram:	No	Report #:	RS220710-01			
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	200		
Dimension inspection										
ITEM	Hardness test		Bonding strength		Porosity		Coating type			
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4			
Actual	1171		77		0.77		WC86-Co10-Cr4			
Chemical component										
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)					
standard	5.1-6.0	9.0-11.0	3.0-5.0							
Actual	5.40	9.70	3.89							
Evaluation & Disposition:			Found to be satisfactory							
Inspected by:			SHI LINGUI							
Approved by:			JI WEI				Date:	2022.7.10		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.7.11		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2207-H25		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	200		
Equipment:	DPT-8		Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE		
Penetrant Type:	Solvent		Penetration time:		15min	Developing time:			10min		
Stage:	After coating tungsten carbide				Inspected surface:	Seat (spraying surface)					
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22086-1-001	2115800348	207	26	SO22086-1-026	2115800348	210				
2	SO22086-1-002	2115800348	207	27	SO22086-1-027	2115800348	210				
3	SO22086-1-003	2115800348	207	28	SO22086-1-028	2115800348	210				
4	SO22086-1-004	2115800348	207	29	SO22086-1-029	2115800348	210				
5	SO22086-1-005	2115800348	207	30	SO22086-1-030	2115800348	210				
6	SO22086-1-006	2115800348	207	31	SO22086-1-031	2115800348	211				
7	SO22086-1-007	2115800348	207	32	SO22086-1-032	2115800348	211				
8	SO22086-1-008	2115800348	207	33	SO22086-1-033	2115800348	211				
9	SO22086-1-009	2115800348	208	34	SO22086-1-034	2115800348	211				
10	SO22086-1-010	2115800348	208	35	SO22086-1-035	2115800348	211				
11	SO22086-1-011	2115800348	208	36	SO22086-1-036	2115800348	211				
12	SO22086-1-012	2115800348	208	37	SO22086-1-037	2115800348	211				
13	SO22086-1-013	2115800348	208	38	SO22086-1-038	2115800348	211				
14	SO22086-1-014	2115800348	208	39	SO22086-1-039	2115800348	211				
15	SO22086-1-015	2115800348	208	40	SO22086-1-040	2115800348	211				
16	SO22086-1-016	2115800348	208	41	SO22086-1-041	2115800348	211				
17	SO22086-1-017	2115800348	209	42	SO22086-1-042	2115800348	211				
18	SO22086-1-018	2115800348	209	43	SO22086-1-043	2115800348	211				
19	SO22086-1-019	2115800348	209	44	SO22086-1-044	2115800348	211				
20	SO22086-1-020	2115800348	209	45	SO22086-1-045	2115800348	211				
21	SO22086-1-021	2115800348	210	46	SO22086-1-046	2115800348	212				
22	SO22086-1-022	2115800348	210	47	SO22086-1-047	2115800348	212				
23	SO22086-1-023	2115800348	210	48	SO22086-1-048	2115800348	212				
24	SO22086-1-024	2115800348	210	49	SO22086-1-049	2115800348	212				
25	SO22086-1-025	2115800348	210	50	SO22086-1-050	2115800348	212				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Ji LIN	Approved by:	Ji WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.7.11

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.7.11	
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2207-H25
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22086-1-051	2115800348	212	76	SO22086-1-076	2115800348	216
52	SO22086-1-052	2115800348	212	77	SO22086-1-077	2115800348	216
53	SO22086-1-053	2115800348	212	78	SO22086-1-078	2115800348	216
54	SO22086-1-054	2115800348	213	79	SO22086-1-079	2115800348	216
55	SO22086-1-055	2115800348	213	80	SO22086-1-080	2115800348	216
56	SO22086-1-056	2115800348	213	81	SO22086-1-081	2115800348	217
57	SO22086-1-057	2115800348	213	82	SO22086-1-082	2115800348	217
58	SO22086-1-058	2115800348	214	83	SO22086-1-083	2115800348	217
59	SO22086-1-059	2115800348	214	84	SO22086-1-084	2115800348	217
60	SO22086-1-060	2115800348	214	85	SO22086-1-085	2115800348	218
61	SO22086-1-061	2115800348	214	86	SO22086-1-086	2115800348	218
62	SO22086-1-062	2115800348	214	87	SO22086-1-087	2115800348	218
63	SO22086-1-063	2115800348	214	88	SO22086-1-088	2115800348	218
64	SO22086-1-064	2115800348	214	89	SO22086-1-089	2115800348	218
65	SO22086-1-065	2115800348	214	90	SO22086-1-090	2115800348	218
66	SO22086-1-066	2115800348	214	91	SO22086-1-091	2115800348	219
67	SO22086-1-067	2115800348	215	92	SO22086-1-092	2115800348	219
68	SO22086-1-068	2115800348	215	93	SO22086-1-093	2115800348	219
69	SO22086-1-069	2115800348	215	94	SO22086-1-094	2115800348	219
70	SO22086-1-070	2115800348	215	95	SO22086-1-095	2115800348	220
71	SO22086-1-071	2115800348	215	96	SO22086-1-096	2115800348	220
72	SO22086-1-072	2115800348	215	97	SO22086-1-097	2115800348	220
73	SO22086-1-073	2115800348	216	98	SO22086-1-098	2115800348	220
74	SO22086-1-074	2115800348	216	99	SO22086-1-099	2115800348	220
75	SO22086-1-075	2115800348	216	100	SO22086-1-100	2115800348	220

Sketch/Inspection Coverage:



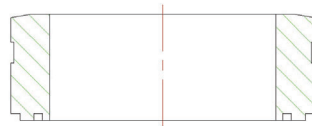
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.7.11

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.7.11		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2207-H25		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	200		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
101	SO22086-1-101	2115800348	221	126	SO22086-1-126	2115800348	225				
102	SO22086-1-102	2115800348	221	127	SO22086-1-127	2115800348	226				
103	SO22086-1-103	2115800348	221	128	SO22086-1-128	2115800348	226				
104	SO22086-1-104	2115800348	222	129	SO22086-1-129	2115800348	226				
105	SO22086-1-105	2115800348	222	130	SO22086-1-130	2115800348	226				
106	SO22086-1-106	2115800348	222	131	SO22086-1-131	2115800348	228				
107	SO22086-1-107	2115800348	222	132	SO22086-1-132	2115800348	228				
108	SO22086-1-108	2115800348	222	133	SO22086-1-133	2115800348	228				
109	SO22086-1-109	2115800348	222	134	SO22086-1-134	2115800348	228				
110	SO22086-1-110	2115800348	223	135	SO22086-1-135	2115800348	228				
111	SO22086-1-111	2115800348	223	136	SO22086-1-136	2115800348	228				
112	SO22086-1-112	2115800348	223	137	SO22086-1-137	2115800348	228				
113	SO22086-1-113	2115800348	223	138	SO22086-1-138	2115800348	228				
114	SO22086-1-114	2115800348	223	139	SO22086-1-139	2115800348	229				
115	SO22086-1-115	2115800348	224	140	SO22086-1-140	2115800348	229				
116	SO22086-1-116	2115800348	224	141	SO22086-1-141	2115800348	229				
117	SO22086-1-117	2115800348	224	142	SO22086-1-142	2115800348	229				
118	SO22086-1-118	2115800348	224	143	SO22086-1-143	2115800348	229				
119	SO22086-1-119	2115800348	224	144	SO22086-1-144	2115800348	229				
120	SO22086-1-120	2115800348	224	145	SO22086-1-145	2115800348	229				
121	SO22086-1-121	2115800348	225	146	SO22086-1-146	2115800348	229				
122	SO22086-1-122	2115800348	225	147	SO22086-1-147	2115800348	230				
123	SO22086-1-123	2115800348	225	148	SO22086-1-148	2115800348	230				
124	SO22086-1-124	2115800348	225	149	SO22086-1-149	2115800348	230				
125	SO22086-1-125	2115800348	225	150	SO22086-1-150	2115800348	230				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.7.11	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.7.11	
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2207-H25
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)		

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
151	SO22086-1-151	2115800348	230	176	SO22086-1-176	2115800348	235
152	SO22086-1-152	2115800348	230	177	SO22086-1-177	2115800348	208
153	SO22086-1-153	2115800348	231	178	SO22086-1-178	2115800348	208
154	SO22086-1-154	2115800348	231	179	SO22086-1-179	2115800348	208
155	SO22086-1-155	2115800348	231	180	SO22086-1-180	2115800348	208
156	SO22086-1-156	2115800348	231	181	SO22086-1-181	2115800348	210
157	SO22086-1-157	2115800348	231	182	SO22086-1-182	2115800348	210
158	SO22086-1-158	2115800348	231	183	SO22086-1-183	2115800348	210
159	SO22086-1-159	2115800348	231	184	SO22086-1-184	2115800348	210
160	SO22086-1-160	2115800348	231	185	SO22086-1-185	2115800348	210
161	SO22086-1-161	2115800348	232	186	SO22086-1-186	2115800348	210
162	SO22086-1-162	2115800348	232	187	SO22086-1-187	2115800348	211
163	SO22086-1-163	2115800348	232	188	SO22086-1-188	2115800348	211
164	SO22086-1-164	2115800348	232	189	SO22086-1-189	2115800348	211
165	SO22086-1-165	2115800348	232	190	SO22086-1-190	2115800348	211
166	SO22086-1-166	2115800348	234	191	SO22086-1-191	2115800348	211
167	SO22086-1-167	2115800348	234	192	SO22086-1-192	2115800348	211
168	SO22086-1-168	2115800348	234	193	SO22086-1-193	2115800348	211
169	SO22086-1-169	2115800348	234	194	SO22086-1-194	2115800348	211
170	SO22086-1-170	2115800348	234	195	SO22086-1-195	2115800348	212
171	SO22086-1-171	2115800348	234	196	SO22086-1-196	2115800348	212
172	SO22086-1-172	2115800348	235	197	SO22086-1-197	2115800348	212
173	SO22086-1-173	2115800348	235	198	SO22086-1-198	2115800348	212
174	SO22086-1-174	2115800348	235	199	SO22086-1-199	2115800348	212
175	SO22086-1-175	2115800348	235	200	SO22086-1-200	2115800348	212

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.7.11

DRAWING # X-111188-01

REPORT INDEX

Purchase Order: 2022086

Quantity: 200PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (X-111188-01)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 7
2.3	Tungsten carbide spray report	Page - 11
2.4	Penetrate testing report	Page - 12

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2022.5.14
Drawing #:	X-111188-01	Specification:	API 6A/ASTM A370	API Monogram:	No
Report #:	SO-20220514-01				
Part No.:		Material:	410 SS, Per NACE MR0175	Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1				Quantity: 200

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	580	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
2115800348			0.10	0.37	0.34	0.006	0.019	0.12	/	0.01	11.62	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY (ft-lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2205013-01			580	700	24	67	226			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	720°C 5.5h AIR	Temper1:	720°C 5.5h AIR
Temper2:	680°C 5.5h AIR	Temper2:	680°C 5.5h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.14
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220514-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	200	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness	
1	SO22086-1-001	2115800348	207	26	SO22086-1-026	2115800348	210	
2	SO22086-1-002	2115800348	207	27	SO22086-1-027	2115800348	210	
3	SO22086-1-003	2115800348	207	28	SO22086-1-028	2115800348	210	
4	SO22086-1-004	2115800348	207	29	SO22086-1-029	2115800348	210	
5	SO22086-1-005	2115800348	207	30	SO22086-1-030	2115800348	210	
6	SO22086-1-006	2115800348	207	31	SO22086-1-031	2115800348	211	
7	SO22086-1-007	2115800348	207	32	SO22086-1-032	2115800348	211	
8	SO22086-1-008	2115800348	207	33	SO22086-1-033	2115800348	211	
9	SO22086-1-009	2115800348	208	34	SO22086-1-034	2115800348	211	
10	SO22086-1-010	2115800348	208	35	SO22086-1-035	2115800348	211	
11	SO22086-1-011	2115800348	208	36	SO22086-1-036	2115800348	211	
12	SO22086-1-012	2115800348	208	37	SO22086-1-037	2115800348	211	
13	SO22086-1-013	2115800348	208	38	SO22086-1-038	2115800348	211	
14	SO22086-1-014	2115800348	208	39	SO22086-1-039	2115800348	211	
15	SO22086-1-015	2115800348	208	40	SO22086-1-040	2115800348	211	
16	SO22086-1-016	2115800348	208	41	SO22086-1-041	2115800348	211	
17	SO22086-1-017	2115800348	209	42	SO22086-1-042	2115800348	211	
18	SO22086-1-018	2115800348	209	43	SO22086-1-043	2115800348	211	
19	SO22086-1-019	2115800348	209	44	SO22086-1-044	2115800348	211	
20	SO22086-1-020	2115800348	209	45	SO22086-1-045	2115800348	211	
21	SO22086-1-021	2115800348	210	46	SO22086-1-046	2115800348	212	
22	SO22086-1-022	2115800348	210	47	SO22086-1-047	2115800348	212	
23	SO22086-1-023	2115800348	210	48	SO22086-1-048	2115800348	212	
24	SO22086-1-024	2115800348	210	49	SO22086-1-049	2115800348	212	
25	SO22086-1-025	2115800348	210	50	SO22086-1-050	2115800348	212	

Sketch:

Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.14
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220514-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200	

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
51	SO22086-1-051	2115800348	212	76	SO22086-1-076	2115800348	216
52	SO22086-1-052	2115800348	212	77	SO22086-1-077	2115800348	216
53	SO22086-1-053	2115800348	212	78	SO22086-1-078	2115800348	216
54	SO22086-1-054	2115800348	213	79	SO22086-1-079	2115800348	216
55	SO22086-1-055	2115800348	213	80	SO22086-1-080	2115800348	216
56	SO22086-1-056	2115800348	213	81	SO22086-1-081	2115800348	217
57	SO22086-1-057	2115800348	213	82	SO22086-1-082	2115800348	217
58	SO22086-1-058	2115800348	214	83	SO22086-1-083	2115800348	217
59	SO22086-1-059	2115800348	214	84	SO22086-1-084	2115800348	217
60	SO22086-1-060	2115800348	214	85	SO22086-1-085	2115800348	218
61	SO22086-1-061	2115800348	214	86	SO22086-1-086	2115800348	218
62	SO22086-1-062	2115800348	214	87	SO22086-1-087	2115800348	218
63	SO22086-1-063	2115800348	214	88	SO22086-1-088	2115800348	218
64	SO22086-1-064	2115800348	214	89	SO22086-1-089	2115800348	218
65	SO22086-1-065	2115800348	214	90	SO22086-1-090	2115800348	218
66	SO22086-1-066	2115800348	214	91	SO22086-1-091	2115800348	219
67	SO22086-1-067	2115800348	215	92	SO22086-1-092	2115800348	219
68	SO22086-1-068	2115800348	215	93	SO22086-1-093	2115800348	219
69	SO22086-1-069	2115800348	215	94	SO22086-1-094	2115800348	219
70	SO22086-1-070	2115800348	215	95	SO22086-1-095	2115800348	220
71	SO22086-1-071	2115800348	215	96	SO22086-1-096	2115800348	220
72	SO22086-1-072	2115800348	215	97	SO22086-1-097	2115800348	220
73	SO22086-1-073	2115800348	216	98	SO22086-1-098	2115800348	220
74	SO22086-1-074	2115800348	216	99	SO22086-1-099	2115800348	220
75	SO22086-1-075	2115800348	216	100	SO22086-1-100	2115800348	220

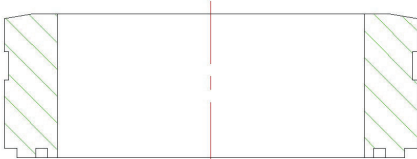
Sketch:

Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.14	
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10		API Monogram:	No	Report #:	SO-20220514-01	
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	200	
Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness		
101	SO22086-1-101	2115800348	221	126	SO22086-1-126	2115800348	225		
102	SO22086-1-102	2115800348	221	127	SO22086-1-127	2115800348	226		
103	SO22086-1-103	2115800348	221	128	SO22086-1-128	2115800348	226		
104	SO22086-1-104	2115800348	222	129	SO22086-1-129	2115800348	226		
105	SO22086-1-105	2115800348	222	130	SO22086-1-130	2115800348	226		
106	SO22086-1-106	2115800348	222	131	SO22086-1-131	2115800348	228		
107	SO22086-1-107	2115800348	222	132	SO22086-1-132	2115800348	228		
108	SO22086-1-108	2115800348	222	133	SO22086-1-133	2115800348	228		
109	SO22086-1-109	2115800348	222	134	SO22086-1-134	2115800348	228		
110	SO22086-1-110	2115800348	223	135	SO22086-1-135	2115800348	228		
111	SO22086-1-111	2115800348	223	136	SO22086-1-136	2115800348	228		
112	SO22086-1-112	2115800348	223	137	SO22086-1-137	2115800348	228		
113	SO22086-1-113	2115800348	223	138	SO22086-1-138	2115800348	228		
114	SO22086-1-114	2115800348	223	139	SO22086-1-139	2115800348	229		
115	SO22086-1-115	2115800348	224	140	SO22086-1-140	2115800348	229		
116	SO22086-1-116	2115800348	224	141	SO22086-1-141	2115800348	229		
117	SO22086-1-117	2115800348	224	142	SO22086-1-142	2115800348	229		
118	SO22086-1-118	2115800348	224	143	SO22086-1-143	2115800348	229		
119	SO22086-1-119	2115800348	224	144	SO22086-1-144	2115800348	229		
120	SO22086-1-120	2115800348	224	145	SO22086-1-145	2115800348	229		
121	SO22086-1-121	2115800348	225	146	SO22086-1-146	2115800348	229		
122	SO22086-1-122	2115800348	225	147	SO22086-1-147	2115800348	230		
123	SO22086-1-123	2115800348	225	148	SO22086-1-148	2115800348	230		
124	SO22086-1-124	2115800348	225	149	SO22086-1-149	2115800348	230		
125	SO22086-1-125	2115800348	225	150	SO22086-1-150	2115800348	230		

Sketch:



Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.14
Drawing #:	X-111188-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220514-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	200	

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
151	SO22086-1-151	2115800348	230	176	SO22086-1-176	2115800348	235
152	SO22086-1-152	2115800348	230	177	SO22086-1-177	2115800348	208
153	SO22086-1-153	2115800348	231	178	SO22086-1-178	2115800348	208
154	SO22086-1-154	2115800348	231	179	SO22086-1-179	2115800348	208
155	SO22086-1-155	2115800348	231	180	SO22086-1-180	2115800348	208
156	SO22086-1-156	2115800348	231	181	SO22086-1-181	2115800348	210
157	SO22086-1-157	2115800348	231	182	SO22086-1-182	2115800348	210
158	SO22086-1-158	2115800348	231	183	SO22086-1-183	2115800348	210
159	SO22086-1-159	2115800348	231	184	SO22086-1-184	2115800348	210
160	SO22086-1-160	2115800348	231	185	SO22086-1-185	2115800348	210
161	SO22086-1-161	2115800348	232	186	SO22086-1-186	2115800348	210
162	SO22086-1-162	2115800348	232	187	SO22086-1-187	2115800348	211
163	SO22086-1-163	2115800348	232	188	SO22086-1-188	2115800348	211
164	SO22086-1-164	2115800348	232	189	SO22086-1-189	2115800348	211
165	SO22086-1-165	2115800348	232	190	SO22086-1-190	2115800348	211
166	SO22086-1-166	2115800348	234	191	SO22086-1-191	2115800348	211
167	SO22086-1-167	2115800348	234	192	SO22086-1-192	2115800348	211
168	SO22086-1-168	2115800348	234	193	SO22086-1-193	2115800348	211
169	SO22086-1-169	2115800348	234	194	SO22086-1-194	2115800348	211
170	SO22086-1-170	2115800348	234	195	SO22086-1-195	2115800348	212
171	SO22086-1-171	2115800348	234	196	SO22086-1-196	2115800348	212
172	SO22086-1-172	2115800348	235	197	SO22086-1-197	2115800348	212
173	SO22086-1-173	2115800348	235	198	SO22086-1-198	2115800348	212
174	SO22086-1-174	2115800348	235	199	SO22086-1-199	2115800348	212
175	SO22086-1-175	2115800348	235	200	SO22086-1-200	2115800348	212

Sketch:

Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.7.8	
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No	Report #:	NCS-2207-Q25	
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE		
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min		
Stage:	After fine finishing			Inspected surface:	Seat (body)				

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22086-1-001	2115800348	207	26	SO22086-1-026	2115800348	210
2	SO22086-1-002	2115800348	207	27	SO22086-1-027	2115800348	210
3	SO22086-1-003	2115800348	207	28	SO22086-1-028	2115800348	210
4	SO22086-1-004	2115800348	207	29	SO22086-1-029	2115800348	210
5	SO22086-1-005	2115800348	207	30	SO22086-1-030	2115800348	210
6	SO22086-1-006	2115800348	207	31	SO22086-1-031	2115800348	211
7	SO22086-1-007	2115800348	207	32	SO22086-1-032	2115800348	211
8	SO22086-1-008	2115800348	207	33	SO22086-1-033	2115800348	211
9	SO22086-1-009	2115800348	208	34	SO22086-1-034	2115800348	211
10	SO22086-1-010	2115800348	208	35	SO22086-1-035	2115800348	211
11	SO22086-1-011	2115800348	208	36	SO22086-1-036	2115800348	211
12	SO22086-1-012	2115800348	208	37	SO22086-1-037	2115800348	211
13	SO22086-1-013	2115800348	208	38	SO22086-1-038	2115800348	211
14	SO22086-1-014	2115800348	208	39	SO22086-1-039	2115800348	211
15	SO22086-1-015	2115800348	208	40	SO22086-1-040	2115800348	211
16	SO22086-1-016	2115800348	208	41	SO22086-1-041	2115800348	211
17	SO22086-1-017	2115800348	209	42	SO22086-1-042	2115800348	211
18	SO22086-1-018	2115800348	209	43	SO22086-1-043	2115800348	211
19	SO22086-1-019	2115800348	209	44	SO22086-1-044	2115800348	211
20	SO22086-1-020	2115800348	209	45	SO22086-1-045	2115800348	211
21	SO22086-1-021	2115800348	210	46	SO22086-1-046	2115800348	212
22	SO22086-1-022	2115800348	210	47	SO22086-1-047	2115800348	212
23	SO22086-1-023	2115800348	210	48	SO22086-1-048	2115800348	212
24	SO22086-1-024	2115800348	210	49	SO22086-1-049	2115800348	212
25	SO22086-1-025	2115800348	210	50	SO22086-1-050	2115800348	212

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Jl LIN	Approved by:	Jl WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.7.8

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.7.8
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2207-Q25	
Part No.:	Material:		410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After fine finishing			Inspected surface:	Seat (body)			

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
51	SO22086-1-051	2115800348	212	76	SO22086-1-076	2115800348	216
52	SO22086-1-052	2115800348	212	77	SO22086-1-077	2115800348	216
53	SO22086-1-053	2115800348	212	78	SO22086-1-078	2115800348	216
54	SO22086-1-054	2115800348	213	79	SO22086-1-079	2115800348	216
55	SO22086-1-055	2115800348	213	80	SO22086-1-080	2115800348	216
56	SO22086-1-056	2115800348	213	81	SO22086-1-081	2115800348	217
57	SO22086-1-057	2115800348	213	82	SO22086-1-082	2115800348	217
58	SO22086-1-058	2115800348	214	83	SO22086-1-083	2115800348	217
59	SO22086-1-059	2115800348	214	84	SO22086-1-084	2115800348	217
60	SO22086-1-060	2115800348	214	85	SO22086-1-085	2115800348	218
61	SO22086-1-061	2115800348	214	86	SO22086-1-086	2115800348	218
62	SO22086-1-062	2115800348	214	87	SO22086-1-087	2115800348	218
63	SO22086-1-063	2115800348	214	88	SO22086-1-088	2115800348	218
64	SO22086-1-064	2115800348	214	89	SO22086-1-089	2115800348	218
65	SO22086-1-065	2115800348	214	90	SO22086-1-090	2115800348	218
66	SO22086-1-066	2115800348	214	91	SO22086-1-091	2115800348	219
67	SO22086-1-067	2115800348	215	92	SO22086-1-092	2115800348	219
68	SO22086-1-068	2115800348	215	93	SO22086-1-093	2115800348	219
69	SO22086-1-069	2115800348	215	94	SO22086-1-094	2115800348	219
70	SO22086-1-070	2115800348	215	95	SO22086-1-095	2115800348	220
71	SO22086-1-071	2115800348	215	96	SO22086-1-096	2115800348	220
72	SO22086-1-072	2115800348	215	97	SO22086-1-097	2115800348	220
73	SO22086-1-073	2115800348	216	98	SO22086-1-098	2115800348	220
74	SO22086-1-074	2115800348	216	99	SO22086-1-099	2115800348	220
75	SO22086-1-075	2115800348	216	100	SO22086-1-100	2115800348	220

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.7.8

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.7.8		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No		Report #:	NCS-2207-Q25			
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC			
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1						Quantity:	200			
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
101	SO22086-1-101	2115800348	221	126	SO22086-1-126	2115800348	225				
102	SO22086-1-102	2115800348	221	127	SO22086-1-127	2115800348	226				
103	SO22086-1-103	2115800348	221	128	SO22086-1-128	2115800348	226				
104	SO22086-1-104	2115800348	222	129	SO22086-1-129	2115800348	226				
105	SO22086-1-105	2115800348	222	130	SO22086-1-130	2115800348	226				
106	SO22086-1-106	2115800348	222	131	SO22086-1-131	2115800348	228				
107	SO22086-1-107	2115800348	222	132	SO22086-1-132	2115800348	228				
108	SO22086-1-108	2115800348	222	133	SO22086-1-133	2115800348	228				
109	SO22086-1-109	2115800348	222	134	SO22086-1-134	2115800348	228				
110	SO22086-1-110	2115800348	223	135	SO22086-1-135	2115800348	228				
111	SO22086-1-111	2115800348	223	136	SO22086-1-136	2115800348	228				
112	SO22086-1-112	2115800348	223	137	SO22086-1-137	2115800348	228				
113	SO22086-1-113	2115800348	223	138	SO22086-1-138	2115800348	228				
114	SO22086-1-114	2115800348	223	139	SO22086-1-139	2115800348	229				
115	SO22086-1-115	2115800348	224	140	SO22086-1-140	2115800348	229				
116	SO22086-1-116	2115800348	224	141	SO22086-1-141	2115800348	229				
117	SO22086-1-117	2115800348	224	142	SO22086-1-142	2115800348	229				
118	SO22086-1-118	2115800348	224	143	SO22086-1-143	2115800348	229				
119	SO22086-1-119	2115800348	224	144	SO22086-1-144	2115800348	229				
120	SO22086-1-120	2115800348	224	145	SO22086-1-145	2115800348	229				
121	SO22086-1-121	2115800348	225	146	SO22086-1-146	2115800348	229				
122	SO22086-1-122	2115800348	225	147	SO22086-1-147	2115800348	230				
123	SO22086-1-123	2115800348	225	148	SO22086-1-148	2115800348	230				
124	SO22086-1-124	2115800348	225	149	SO22086-1-149	2115800348	230				
125	SO22086-1-125	2115800348	225	150	SO22086-1-150	2115800348	230				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:2022.7.8	

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.7.8
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2207-Q25	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)			

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
151	SO22086-1-151	2115800348	230	176	SO22086-1-176	2115800348	235
152	SO22086-1-152	2115800348	230	177	SO22086-1-177	2115800348	208
153	SO22086-1-153	2115800348	231	178	SO22086-1-178	2115800348	208
154	SO22086-1-154	2115800348	231	179	SO22086-1-179	2115800348	208
155	SO22086-1-155	2115800348	231	180	SO22086-1-180	2115800348	208
156	SO22086-1-156	2115800348	231	181	SO22086-1-181	2115800348	210
157	SO22086-1-157	2115800348	231	182	SO22086-1-182	2115800348	210
158	SO22086-1-158	2115800348	231	183	SO22086-1-183	2115800348	210
159	SO22086-1-159	2115800348	231	184	SO22086-1-184	2115800348	210
160	SO22086-1-160	2115800348	231	185	SO22086-1-185	2115800348	210
161	SO22086-1-161	2115800348	232	186	SO22086-1-186	2115800348	210
162	SO22086-1-162	2115800348	232	187	SO22086-1-187	2115800348	211
163	SO22086-1-163	2115800348	232	188	SO22086-1-188	2115800348	211
164	SO22086-1-164	2115800348	232	189	SO22086-1-189	2115800348	211
165	SO22086-1-165	2115800348	232	190	SO22086-1-190	2115800348	211
166	SO22086-1-166	2115800348	234	191	SO22086-1-191	2115800348	211
167	SO22086-1-167	2115800348	234	192	SO22086-1-192	2115800348	211
168	SO22086-1-168	2115800348	234	193	SO22086-1-193	2115800348	211
169	SO22086-1-169	2115800348	234	194	SO22086-1-194	2115800348	211
170	SO22086-1-170	2115800348	234	195	SO22086-1-195	2115800348	212
171	SO22086-1-171	2115800348	234	196	SO22086-1-196	2115800348	212
172	SO22086-1-172	2115800348	235	197	SO22086-1-197	2115800348	212
173	SO22086-1-173	2115800348	235	198	SO22086-1-198	2115800348	212
174	SO22086-1-174	2115800348	235	199	SO22086-1-199	2115800348	212
175	SO22086-1-175	2115800348	235	200	SO22086-1-200	2115800348	212

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.7.8

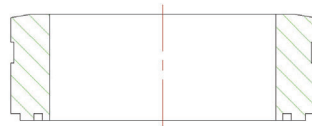
TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.7.10
Drawing #:	X-111188-01	Specification :	API 6A	API Monogram:	No	Report #:	RS220710-01		
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	200		
Dimension inspection									
ITEM	Hardness test		Bonding strength		Porosity		Coating type		
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4		
Actual	1171		77		0.77		WC86-Co10-Cr4		
Chemical component									
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)				
standard	5.1-6.0	9.0-11.0	3.0-5.0						
Actual	5.40	9.70	3.89						
Evaluation & Disposition:			Found to be satisfactory						
Inspected by:			SHI LINGUI						
Approved by:			JI WEI			Date:	2022.7.10		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.7.11		
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2207-H25		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1							Quantity:	200		
Equipment:	DPT-8		Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE		
Penetrant Type:	Solvent		Penetration time:		15min	Developing time:			10min		
Stage:	After coating tungsten carbide				Inspected surface:	Seat (spraying surface)					
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22086-1-001	2115800348	207	26	SO22086-1-026	2115800348	210				
2	SO22086-1-002	2115800348	207	27	SO22086-1-027	2115800348	210				
3	SO22086-1-003	2115800348	207	28	SO22086-1-028	2115800348	210				
4	SO22086-1-004	2115800348	207	29	SO22086-1-029	2115800348	210				
5	SO22086-1-005	2115800348	207	30	SO22086-1-030	2115800348	210				
6	SO22086-1-006	2115800348	207	31	SO22086-1-031	2115800348	211				
7	SO22086-1-007	2115800348	207	32	SO22086-1-032	2115800348	211				
8	SO22086-1-008	2115800348	207	33	SO22086-1-033	2115800348	211				
9	SO22086-1-009	2115800348	208	34	SO22086-1-034	2115800348	211				
10	SO22086-1-010	2115800348	208	35	SO22086-1-035	2115800348	211				
11	SO22086-1-011	2115800348	208	36	SO22086-1-036	2115800348	211				
12	SO22086-1-012	2115800348	208	37	SO22086-1-037	2115800348	211				
13	SO22086-1-013	2115800348	208	38	SO22086-1-038	2115800348	211				
14	SO22086-1-014	2115800348	208	39	SO22086-1-039	2115800348	211				
15	SO22086-1-015	2115800348	208	40	SO22086-1-040	2115800348	211				
16	SO22086-1-016	2115800348	208	41	SO22086-1-041	2115800348	211				
17	SO22086-1-017	2115800348	209	42	SO22086-1-042	2115800348	211				
18	SO22086-1-018	2115800348	209	43	SO22086-1-043	2115800348	211				
19	SO22086-1-019	2115800348	209	44	SO22086-1-044	2115800348	211				
20	SO22086-1-020	2115800348	209	45	SO22086-1-045	2115800348	211				
21	SO22086-1-021	2115800348	210	46	SO22086-1-046	2115800348	212				
22	SO22086-1-022	2115800348	210	47	SO22086-1-047	2115800348	212				
23	SO22086-1-023	2115800348	210	48	SO22086-1-048	2115800348	212				
24	SO22086-1-024	2115800348	210	49	SO22086-1-049	2115800348	212				
25	SO22086-1-025	2115800348	210	50	SO22086-1-050	2115800348	212				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Ji LIN	Approved by:	Ji WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.7.11

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.7.11
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2207-H25	
Part No.:	Material:		410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
51	SO22086-1-051	2115800348	212	76	SO22086-1-076	2115800348	216	
52	SO22086-1-052	2115800348	212	77	SO22086-1-077	2115800348	216	
53	SO22086-1-053	2115800348	212	78	SO22086-1-078	2115800348	216	
54	SO22086-1-054	2115800348	213	79	SO22086-1-079	2115800348	216	
55	SO22086-1-055	2115800348	213	80	SO22086-1-080	2115800348	216	
56	SO22086-1-056	2115800348	213	81	SO22086-1-081	2115800348	217	
57	SO22086-1-057	2115800348	213	82	SO22086-1-082	2115800348	217	
58	SO22086-1-058	2115800348	214	83	SO22086-1-083	2115800348	217	
59	SO22086-1-059	2115800348	214	84	SO22086-1-084	2115800348	217	
60	SO22086-1-060	2115800348	214	85	SO22086-1-085	2115800348	218	
61	SO22086-1-061	2115800348	214	86	SO22086-1-086	2115800348	218	
62	SO22086-1-062	2115800348	214	87	SO22086-1-087	2115800348	218	
63	SO22086-1-063	2115800348	214	88	SO22086-1-088	2115800348	218	
64	SO22086-1-064	2115800348	214	89	SO22086-1-089	2115800348	218	
65	SO22086-1-065	2115800348	214	90	SO22086-1-090	2115800348	218	
66	SO22086-1-066	2115800348	214	91	SO22086-1-091	2115800348	219	
67	SO22086-1-067	2115800348	215	92	SO22086-1-092	2115800348	219	
68	SO22086-1-068	2115800348	215	93	SO22086-1-093	2115800348	219	
69	SO22086-1-069	2115800348	215	94	SO22086-1-094	2115800348	219	
70	SO22086-1-070	2115800348	215	95	SO22086-1-095	2115800348	220	
71	SO22086-1-071	2115800348	215	96	SO22086-1-096	2115800348	220	
72	SO22086-1-072	2115800348	215	97	SO22086-1-097	2115800348	220	
73	SO22086-1-073	2115800348	216	98	SO22086-1-098	2115800348	220	
74	SO22086-1-074	2115800348	216	99	SO22086-1-099	2115800348	220	
75	SO22086-1-075	2115800348	216	100	SO22086-1-100	2115800348	220	

Sketch/Inspection Coverage:



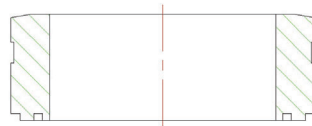
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.7.11

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.7.11
Drawing #:	X-111188-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2207-H25	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C,EE,LU,PSL3 PR1					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
101	SO22086-1-101	2115800348	221	126	SO22086-1-126	2115800348	225	
102	SO22086-1-102	2115800348	221	127	SO22086-1-127	2115800348	226	
103	SO22086-1-103	2115800348	221	128	SO22086-1-128	2115800348	226	
104	SO22086-1-104	2115800348	222	129	SO22086-1-129	2115800348	226	
105	SO22086-1-105	2115800348	222	130	SO22086-1-130	2115800348	226	
106	SO22086-1-106	2115800348	222	131	SO22086-1-131	2115800348	228	
107	SO22086-1-107	2115800348	222	132	SO22086-1-132	2115800348	228	
108	SO22086-1-108	2115800348	222	133	SO22086-1-133	2115800348	228	
109	SO22086-1-109	2115800348	222	134	SO22086-1-134	2115800348	228	
110	SO22086-1-110	2115800348	223	135	SO22086-1-135	2115800348	228	
111	SO22086-1-111	2115800348	223	136	SO22086-1-136	2115800348	228	
112	SO22086-1-112	2115800348	223	137	SO22086-1-137	2115800348	228	
113	SO22086-1-113	2115800348	223	138	SO22086-1-138	2115800348	228	
114	SO22086-1-114	2115800348	223	139	SO22086-1-139	2115800348	229	
115	SO22086-1-115	2115800348	224	140	SO22086-1-140	2115800348	229	
116	SO22086-1-116	2115800348	224	141	SO22086-1-141	2115800348	229	
117	SO22086-1-117	2115800348	224	142	SO22086-1-142	2115800348	229	
118	SO22086-1-118	2115800348	224	143	SO22086-1-143	2115800348	229	
119	SO22086-1-119	2115800348	224	144	SO22086-1-144	2115800348	229	
120	SO22086-1-120	2115800348	224	145	SO22086-1-145	2115800348	229	
121	SO22086-1-121	2115800348	225	146	SO22086-1-146	2115800348	229	
122	SO22086-1-122	2115800348	225	147	SO22086-1-147	2115800348	230	
123	SO22086-1-123	2115800348	225	148	SO22086-1-148	2115800348	230	
124	SO22086-1-124	2115800348	225	149	SO22086-1-149	2115800348	230	
125	SO22086-1-125	2115800348	225	150	SO22086-1-150	2115800348	230	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.7.11	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.7.11	
Drawing #:	X-111188-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2207-H25
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	Seat, 7 1/16" 10M, FLSR, 410 SS with T/C, EE, LU, PSL3 PR1					Quantity:	200
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:		10min	
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
151	SO22086-1-151	2115800348	230	176	SO22086-1-176	2115800348	235
152	SO22086-1-152	2115800348	230	177	SO22086-1-177	2115800348	208
153	SO22086-1-153	2115800348	231	178	SO22086-1-178	2115800348	208
154	SO22086-1-154	2115800348	231	179	SO22086-1-179	2115800348	208
155	SO22086-1-155	2115800348	231	180	SO22086-1-180	2115800348	208
156	SO22086-1-156	2115800348	231	181	SO22086-1-181	2115800348	210
157	SO22086-1-157	2115800348	231	182	SO22086-1-182	2115800348	210
158	SO22086-1-158	2115800348	231	183	SO22086-1-183	2115800348	210
159	SO22086-1-159	2115800348	231	184	SO22086-1-184	2115800348	210
160	SO22086-1-160	2115800348	231	185	SO22086-1-185	2115800348	210
161	SO22086-1-161	2115800348	232	186	SO22086-1-186	2115800348	210
162	SO22086-1-162	2115800348	232	187	SO22086-1-187	2115800348	211
163	SO22086-1-163	2115800348	232	188	SO22086-1-188	2115800348	211
164	SO22086-1-164	2115800348	232	189	SO22086-1-189	2115800348	211
165	SO22086-1-165	2115800348	232	190	SO22086-1-190	2115800348	211
166	SO22086-1-166	2115800348	234	191	SO22086-1-191	2115800348	211
167	SO22086-1-167	2115800348	234	192	SO22086-1-192	2115800348	211
168	SO22086-1-168	2115800348	234	193	SO22086-1-193	2115800348	211
169	SO22086-1-169	2115800348	234	194	SO22086-1-194	2115800348	211
170	SO22086-1-170	2115800348	234	195	SO22086-1-195	2115800348	212
171	SO22086-1-171	2115800348	234	196	SO22086-1-196	2115800348	212
172	SO22086-1-172	2115800348	235	197	SO22086-1-197	2115800348	212
173	SO22086-1-173	2115800348	235	198	SO22086-1-198	2115800348	212
174	SO22086-1-174	2115800348	235	199	SO22086-1-199	2115800348	212
175	SO22086-1-175	2115800348	235	200	SO22086-1-200	2115800348	212

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.7.11

DRAWING # X-182590-01

REPORT INDEX

Purchase Order: 2022073

Quantity: 200PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (X-182590-01)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 7
2.3	Tungsten carbide spray report	Page - 11
2.4	Penetrate testing report	Page - 12

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2022.5.12
Drawing #:	X-182590-01	Specification:	API 6A/ASTM A370	API Monogram:	No
Report #:	SO-20220512-01				
Part No.:		Material:	410 SS, Per NACE MR0175	Coating:	TC
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C				Quantity: 200

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	610	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
2115802508			0.10	0.44	0.28	0.002	0.013	0.148	/	0.03	11.97	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY (Jft-lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2205010-01			610	720	23	67	222			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	710°C 5.5h AIR	Temper1:	710°C 5.5h AIR
Temper2:	680°C 5.5h AIR	Temper2:	680°C 5.5h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	49°C	End Temp.:	49°C

We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.12	
Drawing #:	X-182590-01	Specification:	API 6A/ASTM E10		API Monogram:	No	Report #:	SO-20220512-01	
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC	
Description	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C						Quantity:	200	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness		
1	SO22073-1-001	2115802508	207	26	SO22073-1-026	2115802508	215		
2	SO22073-1-002	2115802508	207	27	SO22073-1-027	2115802508	215		
3	SO22073-1-003	2115802508	207	28	SO22073-1-028	2115802508	215		
4	SO22073-1-004	2115802508	209	29	SO22073-1-029	2115802508	215		
5	SO22073-1-005	2115802508	209	30	SO22073-1-030	2115802508	215		
6	SO22073-1-006	2115802508	209	31	SO22073-1-031	2115802508	215		
7	SO22073-1-007	2115802508	209	32	SO22073-1-032	2115802508	216		
8	SO22073-1-008	2115802508	210	33	SO22073-1-033	2115802508	216		
9	SO22073-1-009	2115802508	210	34	SO22073-1-034	2115802508	216		
10	SO22073-1-010	2115802508	210	35	SO22073-1-035	2115802508	216		
11	SO22073-1-011	2115802508	211	36	SO22073-1-036	2115802508	216		
12	SO22073-1-012	2115802508	211	37	SO22073-1-037	2115802508	216		
13	SO22073-1-013	2115802508	211	38	SO22073-1-038	2115802508	218		
14	SO22073-1-014	2115802508	211	39	SO22073-1-039	2115802508	218		
15	SO22073-1-015	2115802508	211	40	SO22073-1-040	2115802508	218		
16	SO22073-1-016	2115802508	213	41	SO22073-1-041	2115802508	218		
17	SO22073-1-017	2115802508	213	42	SO22073-1-042	2115802508	218		
18	SO22073-1-018	2115802508	213	43	SO22073-1-043	2115802508	218		
19	SO22073-1-019	2115802508	214	44	SO22073-1-044	2115802508	218		
20	SO22073-1-020	2115802508	214	45	SO22073-1-045	2115802508	218		
21	SO22073-1-021	2115802508	214	46	SO22073-1-046	2115802508	218		
22	SO22073-1-022	2115802508	214	47	SO22073-1-047	2115802508	221		
23	SO22073-1-023	2115802508	214	48	SO22073-1-048	2115802508	221		
24	SO22073-1-024	2115802508	214	49	SO22073-1-049	2115802508	224		
25	SO22073-1-025	2115802508	215	50	SO22073-1-050	2115802508	224		

Sketch:



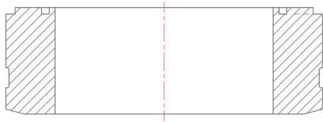
Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:				Date:	2022.5.12	
Drawing #:	X-182590-01	Specification:	API 6A/ASTM E10		API Monogram:	No		Report #:	SO-20220512-01	
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC	
Description	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C							Quantity:	200	

Item	S/N	Heat Log No.	Hardne ss	Item	S/N	Heat Log No.	Hardness
51	SO22073-1-051	2115802508	226	76	SO22073-1-076	2115802508	232
52	SO22073-1-052	2115802508	226	77	SO22073-1-077	2115802508	232
53	SO22073-1-053	2115802508	226	78	SO22073-1-078	2115802508	232
54	SO22073-1-054	2115802508	226	79	SO22073-1-079	2115802508	234
55	SO22073-1-055	2115802508	226	80	SO22073-1-080	2115802508	234
56	SO22073-1-056	2115802508	226	81	SO22073-1-081	2115802508	207
57	SO22073-1-057	2115802508	228	82	SO22073-1-082	2115802508	208
58	SO22073-1-058	2115802508	228	83	SO22073-1-083	2115802508	208
59	SO22073-1-059	2115802508	228	84	SO22073-1-084	2115802508	208
60	SO22073-1-060	2115802508	228	85	SO22073-1-085	2115802508	208
61	SO22073-1-061	2115802508	228	86	SO22073-1-086	2115802508	208
62	SO22073-1-062	2115802508	228	87	SO22073-1-087	2115802508	208
63	SO22073-1-063	2115802508	228	88	SO22073-1-088	2115802508	208
64	SO22073-1-064	2115802508	228	89	SO22073-1-089	2115802508	209
65	SO22073-1-065	2115802508	230	90	SO22073-1-090	2115802508	209
66	SO22073-1-066	2115802508	230	91	SO22073-1-091	2115802508	209
67	SO22073-1-067	2115802508	230	92	SO22073-1-092	2115802508	209
68	SO22073-1-068	2115802508	230	93	SO22073-1-093	2115802508	209
69	SO22073-1-069	2115802508	230	94	SO22073-1-094	2115802508	209
70	SO22073-1-070	2115802508	231	95	SO22073-1-095	2115802508	210
71	SO22073-1-071	2115802508	231	96	SO22073-1-096	2115802508	210
72	SO22073-1-072	2115802508	231	97	SO22073-1-097	2115802508	211
73	SO22073-1-073	2115802508	232	98	SO22073-1-098	2115802508	211
74	SO22073-1-074	2115802508	232	99	SO22073-1-099	2115802508	211
75	SO22073-1-075	2115802508	232	100	SO22073-1-100	2115802508	211

Sketch:



Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022.5.12
Drawing #:	X-182590-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220512-01	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C					Quantity:	200	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
101	SO22073-1-101	2115802508	211	126	SO22073-1-126	2115802508	216	
102	SO22073-1-102	2115802508	212	127	SO22073-1-127	2115802508	216	
103	SO22073-1-103	2115802508	212	128	SO22073-1-128	2115802508	216	
104	SO22073-1-104	2115802508	212	129	SO22073-1-129	2115802508	216	
105	SO22073-1-105	2115802508	212	130	SO22073-1-130	2115802508	216	
106	SO22073-1-106	2115802508	212	131	SO22073-1-131	2115802508	217	
107	SO22073-1-107	2115802508	212	132	SO22073-1-132	2115802508	217	
108	SO22073-1-108	2115802508	213	133	SO22073-1-133	2115802508	217	
109	SO22073-1-109	2115802508	213	134	SO22073-1-134	2115802508	217	
110	SO22073-1-110	2115802508	213	135	SO22073-1-135	2115802508	217	
111	SO22073-1-111	2115802508	213	136	SO22073-1-136	2115802508	217	
112	SO22073-1-112	2115802508	213	137	SO22073-1-137	2115802508	217	
113	SO22073-1-113	2115802508	214	138	SO22073-1-138	2115802508	217	
114	SO22073-1-114	2115802508	214	139	SO22073-1-139	2115802508	218	
115	SO22073-1-115	2115802508	214	140	SO22073-1-140	2115802508	218	
116	SO22073-1-116	2115802508	214	141	SO22073-1-141	2115802508	218	
117	SO22073-1-117	2115802508	214	142	SO22073-1-142	2115802508	218	
118	SO22073-1-118	2115802508	214	143	SO22073-1-143	2115802508	218	
119	SO22073-1-119	2115802508	214	144	SO22073-1-144	2115802508	218	
120	SO22073-1-120	2115802508	215	145	SO22073-1-145	2115802508	219	
121	SO22073-1-121	2115802508	215	146	SO22073-1-146	2115802508	219	
122	SO22073-1-122	2115802508	215	147	SO22073-1-147	2115802508	219	
123	SO22073-1-123	2115802508	215	148	SO22073-1-148	2115802508	219	
124	SO22073-1-124	2115802508	215	149	SO22073-1-149	2115802508	219	
125	SO22073-1-125	2115802508	216	150	SO22073-1-150	2115802508	219	

Sketch:



Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:				Customer PO#:				Date:	2022.5.12	
Drawing #:	X-182590-01	Specification:	API 6A/ASTM E10		API Monogram:	No		Report #:	SO-20220512-01	
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC	
Description	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C							Quantity:	200	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness			
151	SO22073-1-151	2115802508	219	176	SO22073-1-176	2115802508	226			
152	SO22073-1-152	2115802508	219	177	SO22073-1-177	2115802508	226			
153	SO22073-1-153	2115802508	221	178	SO22073-1-178	2115802508	226			
154	SO22073-1-154	2115802508	221	179	SO22073-1-179	2115802508	226			
155	SO22073-1-155	2115802508	221	180	SO22073-1-180	2115802508	226			
156	SO22073-1-156	2115802508	221	181	SO22073-1-181	2115802508	226			
157	SO22073-1-157	2115802508	221	182	SO22073-1-182	2115802508	226			
158	SO22073-1-158	2115802508	221	183	SO22073-1-183	2115802508	226			
159	SO22073-1-159	2115802508	221	184	SO22073-1-184	2115802508	226			
160	SO22073-1-160	2115802508	221	185	SO22073-1-185	2115802508	228			
161	SO22073-1-161	2115802508	222	186	SO22073-1-186	2115802508	228			
162	SO22073-1-162	2115802508	222	187	SO22073-1-187	2115802508	228			
163	SO22073-1-163	2115802508	222	188	SO22073-1-188	2115802508	228			
164	SO22073-1-164	2115802508	222	189	SO22073-1-189	2115802508	228			
165	SO22073-1-165	2115802508	224	190	SO22073-1-190	2115802508	228			
166	SO22073-1-166	2115802508	224	191	SO22073-1-191	2115802508	228			
167	SO22073-1-167	2115802508	224	192	SO22073-1-192	2115802508	228			
168	SO22073-1-168	2115802508	225	193	SO22073-1-193	2115802508	230			
169	SO22073-1-169	2115802508	225	194	SO22073-1-194	2115802508	230			
170	SO22073-1-170	2115802508	225	195	SO22073-1-195	2115802508	230			
171	SO22073-1-171	2115802508	225	196	SO22073-1-196	2115802508	230			
172	SO22073-1-172	2115802508	225	197	SO22073-1-197	2115802508	230			
173	SO22073-1-173	2115802508	225	198	SO22073-1-198	2115802508	230			
174	SO22073-1-174	2115802508	225	199	SO22073-1-199	2115802508	230			
175	SO22073-1-175	2115802508	226	200	SO22073-1-200	2115802508	230			

Sketch:



Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[√] Conforms	JI WEI	Min Fukang
	[] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.5.20		
Drawing #:	X-182590-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No		Report #:	NCS-2205-Q53			
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC			
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C						Quantity:	200			
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22073-1-001	2115802508	207	26	SO22073-1-026	2115802508	215				
2	SO22073-1-002	2115802508	207	27	SO22073-1-027	2115802508	215				
3	SO22073-1-003	2115802508	207	28	SO22073-1-028	2115802508	215				
4	SO22073-1-004	2115802508	209	29	SO22073-1-029	2115802508	215				
5	SO22073-1-005	2115802508	209	30	SO22073-1-030	2115802508	215				
6	SO22073-1-006	2115802508	209	31	SO22073-1-031	2115802508	215				
7	SO22073-1-007	2115802508	209	32	SO22073-1-032	2115802508	216				
8	SO22073-1-008	2115802508	210	33	SO22073-1-033	2115802508	216				
9	SO22073-1-009	2115802508	210	34	SO22073-1-034	2115802508	216				
10	SO22073-1-010	2115802508	210	35	SO22073-1-035	2115802508	216				
11	SO22073-1-011	2115802508	211	36	SO22073-1-036	2115802508	216				
12	SO22073-1-012	2115802508	211	37	SO22073-1-037	2115802508	216				
13	SO22073-1-013	2115802508	211	38	SO22073-1-038	2115802508	218				
14	SO22073-1-014	2115802508	211	39	SO22073-1-039	2115802508	218				
15	SO22073-1-015	2115802508	211	40	SO22073-1-040	2115802508	218				
16	SO22073-1-016	2115802508	213	41	SO22073-1-041	2115802508	218				
17	SO22073-1-017	2115802508	213	42	SO22073-1-042	2115802508	218				
18	SO22073-1-018	2115802508	213	43	SO22073-1-043	2115802508	218				
19	SO22073-1-019	2115802508	214	44	SO22073-1-044	2115802508	218				
20	SO22073-1-020	2115802508	214	45	SO22073-1-045	2115802508	218				
21	SO22073-1-021	2115802508	214	46	SO22073-1-046	2115802508	218				
22	SO22073-1-022	2115802508	214	47	SO22073-1-047	2115802508	221				
23	SO22073-1-023	2115802508	214	48	SO22073-1-048	2115802508	221				
24	SO22073-1-024	2115802508	214	49	SO22073-1-049	2115802508	224				
25	SO22073-1-025	2115802508	215	50	SO22073-1-050	2115802508	224				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.5.20	

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.5.20
Drawing #:	X-182590-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2205-Q53	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
51	SO22073-1-051	2115802508	226	76	SO22073-1-076	2115802508	232	
52	SO22073-1-052	2115802508	226	77	SO22073-1-077	2115802508	232	
53	SO22073-1-053	2115802508	226	78	SO22073-1-078	2115802508	232	
54	SO22073-1-054	2115802508	226	79	SO22073-1-079	2115802508	234	
55	SO22073-1-055	2115802508	226	80	SO22073-1-080	2115802508	234	
56	SO22073-1-056	2115802508	226	81	SO22073-1-081	2115802508	207	
57	SO22073-1-057	2115802508	228	82	SO22073-1-082	2115802508	208	
58	SO22073-1-058	2115802508	228	83	SO22073-1-083	2115802508	208	
59	SO22073-1-059	2115802508	228	84	SO22073-1-084	2115802508	208	
60	SO22073-1-060	2115802508	228	85	SO22073-1-085	2115802508	208	
61	SO22073-1-061	2115802508	228	86	SO22073-1-086	2115802508	208	
62	SO22073-1-062	2115802508	228	87	SO22073-1-087	2115802508	208	
63	SO22073-1-063	2115802508	228	88	SO22073-1-088	2115802508	208	
64	SO22073-1-064	2115802508	228	89	SO22073-1-089	2115802508	209	
65	SO22073-1-065	2115802508	230	90	SO22073-1-090	2115802508	209	
66	SO22073-1-066	2115802508	230	91	SO22073-1-091	2115802508	209	
67	SO22073-1-067	2115802508	230	92	SO22073-1-092	2115802508	209	
68	SO22073-1-068	2115802508	230	93	SO22073-1-093	2115802508	209	
69	SO22073-1-069	2115802508	230	94	SO22073-1-094	2115802508	209	
70	SO22073-1-070	2115802508	231	95	SO22073-1-095	2115802508	210	
71	SO22073-1-071	2115802508	231	96	SO22073-1-096	2115802508	210	
72	SO22073-1-072	2115802508	231	97	SO22073-1-097	2115802508	211	
73	SO22073-1-073	2115802508	232	98	SO22073-1-098	2115802508	211	
74	SO22073-1-074	2115802508	232	99	SO22073-1-099	2115802508	211	
75	SO22073-1-075	2115802508	232	100	SO22073-1-100	2115802508	211	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.5.20

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.5.20		
Drawing #:	X-182590-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No		Report #:	NCS-2205-Q53			
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC			
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C						Quantity:	200			
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After fine finishing			Inspected surface:	Seat (body)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
101	SO22073-1-101	2115802508	211	126	SO22073-1-126	2115802508	216				
102	SO22073-1-102	2115802508	212	127	SO22073-1-127	2115802508	216				
103	SO22073-1-103	2115802508	212	128	SO22073-1-128	2115802508	216				
104	SO22073-1-104	2115802508	212	129	SO22073-1-129	2115802508	216				
105	SO22073-1-105	2115802508	212	130	SO22073-1-130	2115802508	216				
106	SO22073-1-106	2115802508	212	131	SO22073-1-131	2115802508	217				
107	SO22073-1-107	2115802508	212	132	SO22073-1-132	2115802508	217				
108	SO22073-1-108	2115802508	213	133	SO22073-1-133	2115802508	217				
109	SO22073-1-109	2115802508	213	134	SO22073-1-134	2115802508	217				
110	SO22073-1-110	2115802508	213	135	SO22073-1-135	2115802508	217				
111	SO22073-1-111	2115802508	213	136	SO22073-1-136	2115802508	217				
112	SO22073-1-112	2115802508	213	137	SO22073-1-137	2115802508	217				
113	SO22073-1-113	2115802508	214	138	SO22073-1-138	2115802508	217				
114	SO22073-1-114	2115802508	214	139	SO22073-1-139	2115802508	218				
115	SO22073-1-115	2115802508	214	140	SO22073-1-140	2115802508	218				
116	SO22073-1-116	2115802508	214	141	SO22073-1-141	2115802508	218				
117	SO22073-1-117	2115802508	214	142	SO22073-1-142	2115802508	218				
118	SO22073-1-118	2115802508	214	143	SO22073-1-143	2115802508	218				
119	SO22073-1-119	2115802508	214	144	SO22073-1-144	2115802508	218				
120	SO22073-1-120	2115802508	215	145	SO22073-1-145	2115802508	219				
121	SO22073-1-121	2115802508	215	146	SO22073-1-146	2115802508	219				
122	SO22073-1-122	2115802508	215	147	SO22073-1-147	2115802508	219				
123	SO22073-1-123	2115802508	215	148	SO22073-1-148	2115802508	219				
124	SO22073-1-124	2115802508	215	149	SO22073-1-149	2115802508	219				
125	SO22073-1-125	2115802508	216	150	SO22073-1-150	2115802508	219				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.5.20	

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.5.20
Drawing #:	X-182590-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2205-Q53	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:				DYE
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:				10min
Stage:	After fine finishing			Inspected surface:	Seat (body)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
151	SO22073-1-151	2115802508	219	176	SO22073-1-176	2115802508	226	
152	SO22073-1-152	2115802508	219	177	SO22073-1-177	2115802508	226	
153	SO22073-1-153	2115802508	221	178	SO22073-1-178	2115802508	226	
154	SO22073-1-154	2115802508	221	179	SO22073-1-179	2115802508	226	
155	SO22073-1-155	2115802508	221	180	SO22073-1-180	2115802508	226	
156	SO22073-1-156	2115802508	221	181	SO22073-1-181	2115802508	226	
157	SO22073-1-157	2115802508	221	182	SO22073-1-182	2115802508	226	
158	SO22073-1-158	2115802508	221	183	SO22073-1-183	2115802508	226	
159	SO22073-1-159	2115802508	221	184	SO22073-1-184	2115802508	226	
160	SO22073-1-160	2115802508	221	185	SO22073-1-185	2115802508	228	
161	SO22073-1-161	2115802508	222	186	SO22073-1-186	2115802508	228	
162	SO22073-1-162	2115802508	222	187	SO22073-1-187	2115802508	228	
163	SO22073-1-163	2115802508	222	188	SO22073-1-188	2115802508	228	
164	SO22073-1-164	2115802508	222	189	SO22073-1-189	2115802508	228	
165	SO22073-1-165	2115802508	224	190	SO22073-1-190	2115802508	228	
166	SO22073-1-166	2115802508	224	191	SO22073-1-191	2115802508	228	
167	SO22073-1-167	2115802508	224	192	SO22073-1-192	2115802508	228	
168	SO22073-1-168	2115802508	225	193	SO22073-1-193	2115802508	230	
169	SO22073-1-169	2115802508	225	194	SO22073-1-194	2115802508	230	
170	SO22073-1-170	2115802508	225	195	SO22073-1-195	2115802508	230	
171	SO22073-1-171	2115802508	225	196	SO22073-1-196	2115802508	230	
172	SO22073-1-172	2115802508	225	197	SO22073-1-197	2115802508	230	
173	SO22073-1-173	2115802508	225	198	SO22073-1-198	2115802508	230	
174	SO22073-1-174	2115802508	225	199	SO22073-1-199	2115802508	230	
175	SO22073-1-175	2115802508	226	200	SO22073-1-200	2115802508	230	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Jl LIN	Approved by:	Jl WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.5.20

TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.5.23	
Drawing #:	X-182590-01	Specification :	API 6A		API Monogram:	No	Report #:	RS220523-01		
Part No.:		Material:	410 SS,Per NACE MR0175					Coating:	TC	
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C							Quantity:	200	
Dimension inspection										
ITEM	Hardness test		Bonding strength		Porosity		Coating type			
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4			
Actual	1171		77		0.77		WC86-Co10-Cr4			
Chemical component										
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)					
standard	5.1-6.0	9.0-11.0	3.0-5.0							
Actual	5.40	9.70	3.89							
Evaluation & Disposition:			Found to be satisfactory							
Inspected by:			SHI LINGUI							
Approved by:			JI WEI				Date:	2022.5.23		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.5.25		
Drawing #:	X-182590-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No		Report #:	NCS-2205-H53			
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC			
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C						Quantity:	200			
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
1	SO22073-1-001	2115802508	207	26	SO22073-1-026	2115802508	215				
2	SO22073-1-002	2115802508	207	27	SO22073-1-027	2115802508	215				
3	SO22073-1-003	2115802508	207	28	SO22073-1-028	2115802508	215				
4	SO22073-1-004	2115802508	209	29	SO22073-1-029	2115802508	215				
5	SO22073-1-005	2115802508	209	30	SO22073-1-030	2115802508	215				
6	SO22073-1-006	2115802508	209	31	SO22073-1-031	2115802508	215				
7	SO22073-1-007	2115802508	209	32	SO22073-1-032	2115802508	216				
8	SO22073-1-008	2115802508	210	33	SO22073-1-033	2115802508	216				
9	SO22073-1-009	2115802508	210	34	SO22073-1-034	2115802508	216				
10	SO22073-1-010	2115802508	210	35	SO22073-1-035	2115802508	216				
11	SO22073-1-011	2115802508	211	36	SO22073-1-036	2115802508	216				
12	SO22073-1-012	2115802508	211	37	SO22073-1-037	2115802508	216				
13	SO22073-1-013	2115802508	211	38	SO22073-1-038	2115802508	218				
14	SO22073-1-014	2115802508	211	39	SO22073-1-039	2115802508	218				
15	SO22073-1-015	2115802508	211	40	SO22073-1-040	2115802508	218				
16	SO22073-1-016	2115802508	213	41	SO22073-1-041	2115802508	218				
17	SO22073-1-017	2115802508	213	42	SO22073-1-042	2115802508	218				
18	SO22073-1-018	2115802508	213	43	SO22073-1-043	2115802508	218				
19	SO22073-1-019	2115802508	214	44	SO22073-1-044	2115802508	218				
20	SO22073-1-020	2115802508	214	45	SO22073-1-045	2115802508	218				
21	SO22073-1-021	2115802508	214	46	SO22073-1-046	2115802508	218				
22	SO22073-1-022	2115802508	214	47	SO22073-1-047	2115802508	221				
23	SO22073-1-023	2115802508	214	48	SO22073-1-048	2115802508	221				
24	SO22073-1-024	2115802508	214	49	SO22073-1-049	2115802508	224				
25	SO22073-1-025	2115802508	215	50	SO22073-1-050	2115802508	224				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.5.25

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.5.25
Drawing #:	X-182590-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2205-H53	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
51	SO22073-1-051	2115802508	226	76	SO22073-1-076	2115802508	232	
52	SO22073-1-052	2115802508	226	77	SO22073-1-077	2115802508	232	
53	SO22073-1-053	2115802508	226	78	SO22073-1-078	2115802508	232	
54	SO22073-1-054	2115802508	226	79	SO22073-1-079	2115802508	234	
55	SO22073-1-055	2115802508	226	80	SO22073-1-080	2115802508	234	
56	SO22073-1-056	2115802508	226	81	SO22073-1-081	2115802508	207	
57	SO22073-1-057	2115802508	228	82	SO22073-1-082	2115802508	208	
58	SO22073-1-058	2115802508	228	83	SO22073-1-083	2115802508	208	
59	SO22073-1-059	2115802508	228	84	SO22073-1-084	2115802508	208	
60	SO22073-1-060	2115802508	228	85	SO22073-1-085	2115802508	208	
61	SO22073-1-061	2115802508	228	86	SO22073-1-086	2115802508	208	
62	SO22073-1-062	2115802508	228	87	SO22073-1-087	2115802508	208	
63	SO22073-1-063	2115802508	228	88	SO22073-1-088	2115802508	208	
64	SO22073-1-064	2115802508	228	89	SO22073-1-089	2115802508	209	
65	SO22073-1-065	2115802508	230	90	SO22073-1-090	2115802508	209	
66	SO22073-1-066	2115802508	230	91	SO22073-1-091	2115802508	209	
67	SO22073-1-067	2115802508	230	92	SO22073-1-092	2115802508	209	
68	SO22073-1-068	2115802508	230	93	SO22073-1-093	2115802508	209	
69	SO22073-1-069	2115802508	230	94	SO22073-1-094	2115802508	209	
70	SO22073-1-070	2115802508	231	95	SO22073-1-095	2115802508	210	
71	SO22073-1-071	2115802508	231	96	SO22073-1-096	2115802508	210	
72	SO22073-1-072	2115802508	231	97	SO22073-1-097	2115802508	211	
73	SO22073-1-073	2115802508	232	98	SO22073-1-098	2115802508	211	
74	SO22073-1-074	2115802508	232	99	SO22073-1-099	2115802508	211	
75	SO22073-1-075	2115802508	232	100	SO22073-1-100	2115802508	211	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.5.25

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.5.25
Drawing #:	X-182590-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2205-H53	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C					Quantity:	200	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:		DYE	
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:		10min	
Stage:	After coating tungsten carbide			Inspected surface:	Seat (spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
101	SO22073-1-101	2115802508	211	126	SO22073-1-126	2115802508	216	
102	SO22073-1-102	2115802508	212	127	SO22073-1-127	2115802508	216	
103	SO22073-1-103	2115802508	212	128	SO22073-1-128	2115802508	216	
104	SO22073-1-104	2115802508	212	129	SO22073-1-129	2115802508	216	
105	SO22073-1-105	2115802508	212	130	SO22073-1-130	2115802508	216	
106	SO22073-1-106	2115802508	212	131	SO22073-1-131	2115802508	217	
107	SO22073-1-107	2115802508	212	132	SO22073-1-132	2115802508	217	
108	SO22073-1-108	2115802508	213	133	SO22073-1-133	2115802508	217	
109	SO22073-1-109	2115802508	213	134	SO22073-1-134	2115802508	217	
110	SO22073-1-110	2115802508	213	135	SO22073-1-135	2115802508	217	
111	SO22073-1-111	2115802508	213	136	SO22073-1-136	2115802508	217	
112	SO22073-1-112	2115802508	213	137	SO22073-1-137	2115802508	217	
113	SO22073-1-113	2115802508	214	138	SO22073-1-138	2115802508	217	
114	SO22073-1-114	2115802508	214	139	SO22073-1-139	2115802508	218	
115	SO22073-1-115	2115802508	214	140	SO22073-1-140	2115802508	218	
116	SO22073-1-116	2115802508	214	141	SO22073-1-141	2115802508	218	
117	SO22073-1-117	2115802508	214	142	SO22073-1-142	2115802508	218	
118	SO22073-1-118	2115802508	214	143	SO22073-1-143	2115802508	218	
119	SO22073-1-119	2115802508	214	144	SO22073-1-144	2115802508	218	
120	SO22073-1-120	2115802508	215	145	SO22073-1-145	2115802508	219	
121	SO22073-1-121	2115802508	215	146	SO22073-1-146	2115802508	219	
122	SO22073-1-122	2115802508	215	147	SO22073-1-147	2115802508	219	
123	SO22073-1-123	2115802508	215	148	SO22073-1-148	2115802508	219	
124	SO22073-1-124	2115802508	215	149	SO22073-1-149	2115802508	219	
125	SO22073-1-125	2115802508	216	150	SO22073-1-150	2115802508	219	

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.5.25

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:		2022.5.25	
Drawing #:	X-182590-01	Specification	API Spec 6A/ ASTM E165	API Monogram:	No	Report #:	NCS-2205-H53
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description:	Seat, 7 1/16" 15M, FLSR, 410 SS with T/C					Quantity:	200
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE		
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min		
Stage:	After coating tungsten carbide		Inspected surface:	Seat (spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
151	SO22073-1-151	2115802508	219	176	SO22073-1-176	2115802508	226
152	SO22073-1-152	2115802508	219	177	SO22073-1-177	2115802508	226
153	SO22073-1-153	2115802508	221	178	SO22073-1-178	2115802508	226
154	SO22073-1-154	2115802508	221	179	SO22073-1-179	2115802508	226
155	SO22073-1-155	2115802508	221	180	SO22073-1-180	2115802508	226
156	SO22073-1-156	2115802508	221	181	SO22073-1-181	2115802508	226
157	SO22073-1-157	2115802508	221	182	SO22073-1-182	2115802508	226
158	SO22073-1-158	2115802508	221	183	SO22073-1-183	2115802508	226
159	SO22073-1-159	2115802508	221	184	SO22073-1-184	2115802508	226
160	SO22073-1-160	2115802508	221	185	SO22073-1-185	2115802508	228
161	SO22073-1-161	2115802508	222	186	SO22073-1-186	2115802508	228
162	SO22073-1-162	2115802508	222	187	SO22073-1-187	2115802508	228
163	SO22073-1-163	2115802508	222	188	SO22073-1-188	2115802508	228
164	SO22073-1-164	2115802508	222	189	SO22073-1-189	2115802508	228
165	SO22073-1-165	2115802508	224	190	SO22073-1-190	2115802508	228
166	SO22073-1-166	2115802508	224	191	SO22073-1-191	2115802508	228
167	SO22073-1-167	2115802508	224	192	SO22073-1-192	2115802508	228
168	SO22073-1-168	2115802508	225	193	SO22073-1-193	2115802508	230
169	SO22073-1-169	2115802508	225	194	SO22073-1-194	2115802508	230
170	SO22073-1-170	2115802508	225	195	SO22073-1-195	2115802508	230
171	SO22073-1-171	2115802508	225	196	SO22073-1-196	2115802508	230
172	SO22073-1-172	2115802508	225	197	SO22073-1-197	2115802508	230
173	SO22073-1-173	2115802508	225	198	SO22073-1-198	2115802508	230
174	SO22073-1-174	2115802508	225	199	SO22073-1-199	2115802508	230
175	SO22073-1-175	2115802508	226	200	SO22073-1-200	2115802508	230

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:		Found to be satisfactory	
Inspected by:	JI LIN	Approved by:	JI WEI
		Organization:	QC Department
NDT Level:	II	Date:	2022.5.25

X-182589-01

REPORT INDEX

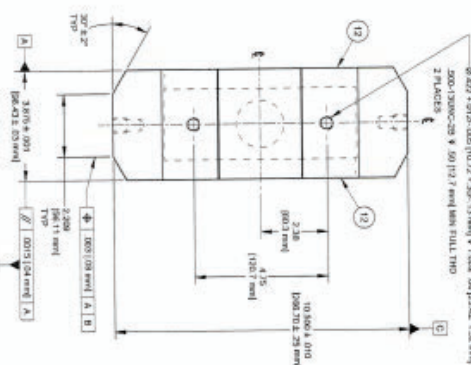
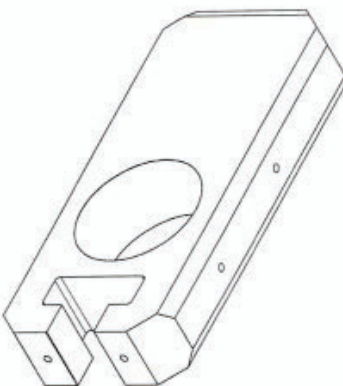
Purchase Order: LB18-157"VER BAC"

Quantity: 46

Shipment No.: 20180905-2

Shipment Date: 2018.09.05

Activity No.	Characteristics	Reference Page
1.1	DRAWING # X-182589-01	Page - 2
1.1.1	Metallurgical Test Certificate	Page – 3
1.1.2	Mechanical Testing	Page – 3
1.1.3	Chemical Testing	Page – 3
1.1.4	Heat Treatment	Page – 3
2.1	Hardness Test	Page - 4～5
2.2	Ultrasonic Testing	Page - 6～7
2.3	Magnetic Particle Inspection Report	Page - 8～9



B & J Wholesale, LLC

METALLURGICAL TEST CERTIFICATE

Customer:	SHLB	Customer PO#:	LB18-157"VER BAC"	Date:	2018.09.05
Drawing #:	X-182589-01	Specification:	7 1\16 15M	API Monogram:	Y/N
Part No.:	—	Material:	410	Coating:	WC
Description:	GATE 7 1\16 15M			Quantity:	46

TEST CONDITION

Test Bar Size:	4"	Bar Diameter:	100 mm
Melt Practice:	VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	506N/mm ²	Gauge Length:	6000

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			-	-	-	-	-	-	-	-	11.50	-
			0.15	1.00	1.00	0.025	0.025	-	-	-	13.50	-
			0.13	0.47	0.35	0.001	0.019	0.41	-	-	11.77	-

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY J(ft.lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			75	95	18.0	35.0	197	27J	-	-
Spec. Max			-	-	-	-	235	-	-	-
B3803100			82	99	28	41	229	30J	-	-

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	Austenitize	Normalized:	Austenitize
Quench:	1000°C	Quench:	1000°C
Temper:	720°C-660°C	Temper:	720°C-660°C
Quenchant:	Oil	Quenchant:	Oil
Start Temp.:	36°C	Start Temp.:	36°C
End Temp.:	48°C	End Temp.:	48°C

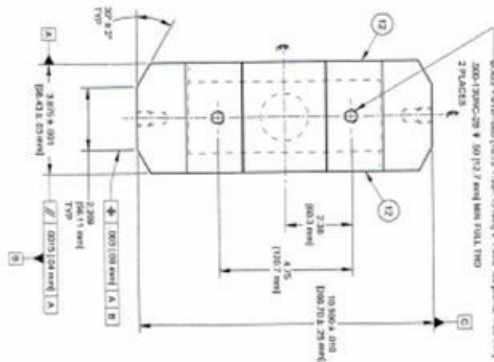
*We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.*

Inspected By:	Qian Huang	Approved By:	Bo Wang

HARDNESS TEST REPORT

Customer:	SHLB		Customer PO#:		LB18-157"VER BAC"		Date:	2018.09.05
Drawing #:	X-182589-01	Specification:	7 1\16 15M		API Monogram:	Y/N	Report #:	20180905-2
Part No.:	—	Material:	410				Coating:	WC
Description:	GATE 7 1\16 15M						Quantity:	46
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	SNPI011815701-1	B3803100	HB 222	17	SNPI011815701-17	B3803100	HB 224	
2	SNPI011815701-2	B3803100	HB 222	18	SNPI011815701-18	B3803100	HB 224	
3	SNPI011815701-3	B3803100	HB 225	19	SNPI011815701-19	B3803100	HB 227	
4	SNPI011815701-4	B3803100	HB 225	21	SNPI011815701-21	B3803100	HB 230	
5	SNPI011815701-5	B3803100	HB 228	22	SNPI011815701-22	B3803100	HB 230	
6	SNPI011815701-6	B3803100	HB 228	23	SNPI011815701-23	B3803100	HB 222	
7	SNPI011815701-7	B3803100	HB 225	24	SNPI011815701-24	B3803100	HB 222	
8	SNPI011815701-8	B3803100	HB 220	25	SNPI011815701-25	B3803100	HB 225	
9	SNPI011815701-9	B3803100	HB 223	26	SNPI011815701-26	B3803100	HB 225	
11	SNPI011815701-11	B3803100	HB 226	27	SNPI011815701-27	B3803100	HB 228	
12	SNPI011815701-12	B3803100	HB 226	28	SNPI011815701-28	B3803100	HB 228	
13	SNPI011815701-13	B3803100	HB 229	29	SNPI011815701-29	B3803100	HB 220	
14	SNPI011815701-14	B3803100	HB 229	30	SNPI011815701-30	B3803100	HB 220	
15	SNPI011815701-15	B3803100	HB 221	31	SNPI011815701-31	B3803100	HB 222	
16	SNPI011815701-16	B3803100	HB 221	32	SNPI011815701-32	B3803100	HB 224	

Sketch:

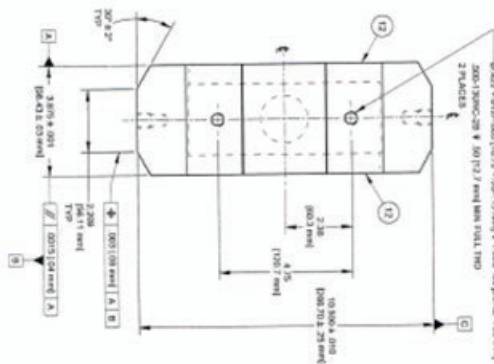


Method Used:	HBW : D10 mm/ 3000kgf / 15s		
Acceptable Hardness:	HB197-235	Approved By:	Examined By:
Judgments:	[✓] Conforms	Bo Wang	Guoyin Sheng
	[] Does Not Conform		

HARDNESS TEST REPORT

Customer:	SHLB		Customer PO#:		LB18-157"VER BAC"		Date:	2018.09.05
Drawing #:	X-182589-01	Specification:	7 1\16 15M		API Monogram:	Y/N	Report #:	20180905-2
Part No.:	—	Material:	410				Coating:	WC
Description:	GATE 7 1\16 15M						Quantity:	46
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
33	SNPI011815701-33	B3803100	HB 226	50	SNPI011815701-50	B3803100	HB 227	
34	SNPI011815701-34	B3803100	HB 228					
35	SNPI011815701-35	B3803100	HB 230					
36	SNPI011815701-36	B3803100	HB 221					
38	SNPI011815701-38	B3803100	HB 225					
39	SNPI011815701-39	B3803100	HB 227					
40	SNPI011815701-40	B3803100	HB 229					
41	SNPI011815701-41	B3803100	HB 220					
42	SNPI011815701-42	B3803100	HB 222					
43	SNPI011815701-43	B3803100	HB 224					
44	SNPI011815701-44	B3803100	HB 226					
45	SNPI011815701-45	B3803100	HB 228					
46	SNPI011815701-46	B3803100	HB 230					
48	SNPI011815701-48	B3803100	HB 223					
49	SNPI011815701-49	B3803100	HB 225					

Sketch:

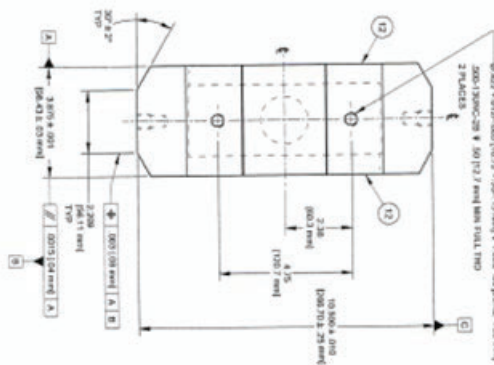


Method Used:	HBW : D10 mm/ 3000kgf / 15s		
Acceptable Hardness:	HB197-235	Approved By:	Examined By:
Judgments:	[✓] Conforms	Bo Wang	Guoyin Sheng
	[] Does Not Conform		

ULTRASONIC EXAMINATION REPORT

Customer:	SHLB		Customer PO#:	LB18-157"VER BAC"		Date:	2018.09.05
Drawing #:	X-182589-01	Specification:	7 1\16 15M	API Monogram:	Y/N	Report #:	20180905-2
Part No.:	—	Material:	410			Coating:	WC
Description:	GATE 7 1\16 15M					Quantity:	46
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
33	SNPI011815701-33	B3803100	HB 226	50	SNPI011815701-50	B3803100	HB 227
34	SNPI011815701-34	B3803100	HB 228				
35	SNPI011815701-35	B3803100	HB 230				
36	SNPI011815701-36	B3803100	HB 221				
38	SNPI011815701-38	B3803100	HB 225				
39	SNPI011815701-39	B3803100	HB 227				
40	SNPI011815701-40	B3803100	HB 229				
41	SNPI011815701-41	B3803100	HB 220				
42	SNPI011815701-42	B3803100	HB 222				
43	SNPI011815701-43	B3803100	HB 224				
44	SNPI011815701-44	B3803100	HB 226				
45	SNPI011815701-45	B3803100	HB 228				
46	SNPI011815701-46	B3803100	HB 230				
48	SNPI011815701-48	B3803100	HB 223				
49	SNPI011815701-49	B3803100	HB 225				

Sketch:



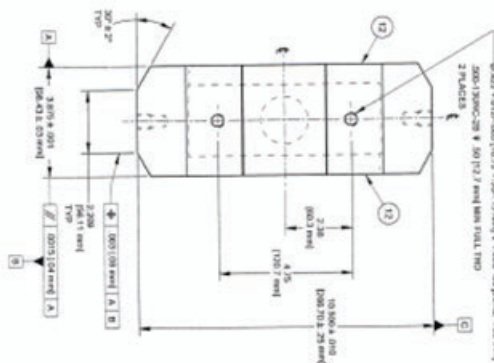
***ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.

UT Code:	L-001	Technique:	Straight/Contact	Examined By:	Chenyang Pan
Exam. Stage:	24h	Calibration:	Y(2018-05-10)	Level as per UT:	Level II
Equipment:	TOPSONIC TS-V6e	Couplant:	Machine oil		
Probe Used:	2.5P20	Acceptance Criteria:	API 6A PSL3 EE LU	Approved by:	—
Instrmt/Ident.#:	V08035	Test Gain:	6db	Level as per UT:	—

MAGNETIC PARTICLE INSPECTION REPORT

Customer:	SHLB		Customer PO#:	LB18-157"VER BAC"		Date:	2018.09.05
Drawing #:	X-182589-01	Specification:	7 1\16 15M	API Monogram:	Y/N	Report #:	20180905-2
Part No.:	—	Material:	410			Coating:	WC
Description:	GATE 7 1\16 15M					Quantity:	46
Equipment:	Cy-1000	Acceptance Criteria:		API 6A/PSL3	Circular AMPS:		1000A
Test Method:	Wet Fluorescent	Particle Type:		fluorescent	UV-Light Intensity:		12900uw/c m²
Stage:	As ground	Concentration:		0.1-0.4	Magnetizing Time:		1-2s
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SNPI011815701-1	B3803100	HB 222	17	SNPI011815701-17	B3803100	HB 224
2	SNPI011815701-2	B3803100	HB 222	18	SNPI011815701-18	B3803100	HB 224
3	SNPI011815701-3	B3803100	HB 225	19	SNPI011815701-19	B3803100	HB 227
4	SNPI011815701-4	B3803100	HB 225	21	SNPI011815701-21	B3803100	HB 230
5	SNPI011815701-5	B3803100	HB 228	22	SNPI011815701-22	B3803100	HB 230
6	SNPI011815701-6	B3803100	HB 228	23	SNPI011815701-23	B3803100	HB 222
7	SNPI011815701-7	B3803100	HB 225	24	SNPI011815701-24	B3803100	HB 222
8	SNPI011815701-8	B3803100	HB 220	25	SNPI011815701-25	B3803100	HB 225
9	SNPI011815701-9	B3803100	HB 223	26	SNPI011815701-26	B3803100	HB 225
11	SNPI011815701-11	B3803100	HB 226	27	SNPI011815701-27	B3803100	HB 228
12	SNPI011815701-12	B3803100	HB 226	28	SNPI011815701-28	B3803100	HB 228
13	SNPI011815701-13	B3803100	HB 229	29	SNPI011815701-29	B3803100	HB 220
14	SNPI011815701-14	B3803100	HB 229	30	SNPI011815701-30	B3803100	HB 220
15	SNPI011815701-15	B3803100	HB 221	31	SNPI011815701-31	B3803100	HB 222
16	SNPI011815701-16	B3803100	HB 221	32	SNPI011815701-32	B3803100	HB 224

Sketch/Inspection Coverage:



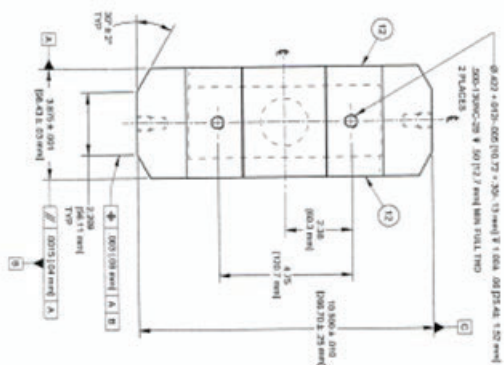
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Chenyang Pan	Inspected by:	Chenyang Pan
Approved by:	—	Approved by:	—
NDT Level:	Level II	NDT Level:	Level II

MAGNETIC PARTICLE INSPECTION REPORT

Customer:	SHLB			Customer PO#:	LB18-157"VER BAC"		Date:	2018.09.05
Drawing #:	X-182589-01	Specification:	7 1\16 15M		API Monogram:	Y/N	Report #:	20180905-2
Part No.:	—	Material:	410				Coating:	WC
Description:	GATE 7 1\16 15M						Quantity:	46
Equipment:	Cy-1000	Acceptance Criteria:		API 6A/PSL3	Circular AMPS:			1000A
Test Method:	Wet Fluorescent	Particle Type:		fluorescent	UV-Light Intensity:			12900uw/cm ²
Stage:	As ground	Concentration:		0.1-0.4	Magnetizing Time:			1-2s
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
33	SNPI011815701-33	B3803100	HB 226	50	SNPI011815701-50	B3803100	HB 227	
34	SNPI011815701-34	B3803100	HB 228					
35	SNPI011815701-35	B3803100	HB 230					
36	SNPI011815701-36	B3803100	HB 221					
38	SNPI011815701-38	B3803100	HB 225					
39	SNPI011815701-39	B3803100	HB 227					
40	SNPI011815701-40	B3803100	HB 229					
41	SNPI011815701-41	B3803100	HB 220					
42	SNPI011815701-42	B3803100	HB 222					
43	SNPI011815701-43	B3803100	HB 224					
44	SNPI011815701-44	B3803100	HB 226					
45	SNPI011815701-45	B3803100	HB 228					
46	SNPI011815701-46	B3803100	HB 230					
48	SNPI011815701-48	B3803100	HB 223					
49	SNPI011815701-49	B3803100	HB 225					

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Chenyang Pan	Inspected by:	Chenyang Pan
Approved by:	—	Approved by:	—
NDT Level:	Level II	NDT Level:	Level II

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qipu District Shanghai China

REPORT INDEX

Purchase Order: LB17-266-2

Quantity: 150 EA

Shipment No. :

Shipment Date:

[illegible]

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

METALLURGICAL TEST CERTIFICATE

Serial No:	X-111183-01-01...150		PO# // Item	LB17-266-2	Date:	2017-9-26						
Part No:	LSTM710CAMERON		API Monogram	YES	Report#:							
Specification	API Spec 6A/ LU PSL3 PR1		Material:	410 75k	Coating:							
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE				Qty:	150 EA						
TEST CONDITION												
Test Bar Size:	QTC, 4" x 4" x 8"		Bar Di:	12.7 mm (0.5")								
Melt Practice	EF + LF + VD		Reduction Ratio Min:	4:1								
Yield Stress	0.2% offset		Gauge Length	50.8mm								
CHEMICAL COMPOSITION												
Mill No:	Qty	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec Min			0.08								11.5	0.20
Spec Max			0.15	1.00	1.00	0.025	0.025	0.75		0.5	13.5	0.30
14103055908	150	1	0.12	0.36	0.37	0.005	0.022	0.24			12.8	
MECHANICAL COMPOSITION												
Heat Lot No.	QTY.	Test No.	Yield Strength (Psi)	Tensile Strength (Psi)	Elongation%	Reduction of Area%	Hardness HB	10mm×10mm CHARPY J (ft. lb) At-46° c	Minimum Lateral	Shear Fraction		
Spec Min			75K	95K	17.0	35.0	197	27J				
Spec Max							235					
171116-4	150	1	92.5 K	109 K	27.3	61.2	220	44.38.47				
Heat Treatment												
Forgings						Test Bar(OTC)						
Normalized:						Normalized:						
Austenitized:						Austenitized:						
Quenchant:						Quenchant:						
Start Temp:						Start Temp:						
End Temp:						End Temp:						
Temper:						Temper:						
Temper:						Temper:						
We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company and also no welding or weld repair was performed on subject parts.												
Inspected by:		Fu Wei Ming				Approved by:		Wu Xu Zhong				

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

Hardness Test Report

Serial No:	X-111183-01-01...150	PO# // Item	LB17-266-2	Date:	2017-9-26		
Part No:	LSTM710CAMERON	API Monogram	YES	Report#:			
Specification	API Spec 6A/ LU PSL3 PR1	Material:	410 75k	Coating:			
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE			Qty:	150 EA		
Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
1	X-111183-01-01	171116-4	220	21	X-111183-01-21	171116-4	220
2	X-111183-01-02	171116-4	220	22	X-111183-01-22	171116-4	220
3	X-111183-01-03	171116-4	220	23	X-111183-01-23	171116-4	220
4	X-111183-01-04	171116-4	220	24	X-111183-01-24	171116-4	220
5	X-111183-01-05	171116-4	220	25	X-111183-01-25	171116-4	220
6	X-111183-01-06	171116-4	220	26	X-111183-01-26	171116-4	220
7	X-111183-01-07	171116-4	220	27	X-111183-01-27	171116-4	220
8	X-111183-01-08	171116-4	220	28	X-111183-01-28	171116-4	220
9	X-111183-01-09	171116-4	220	29	X-111183-01-29	171116-4	220
10	X-111183-01-10	171116-4	220	30	X-111183-01-30	171116-4	220
11	X-111183-01-11	171116-4	220	31	X-111183-01-31	171116-4	220
12	X-111183-01-12	171116-4	220	32	X-111183-01-32	171116-4	220
13	X-111183-01-13	171116-4	220	33	X-111183-01-33	171116-4	220
14	X-111183-01-14	171116-4	220	34	X-111183-01-34	171116-4	220
15	X-111183-01-15	171116-4	220	35	X-111183-01-35	171116-4	220
16	X-111183-01-16	171116-4	220	36	X-111183-01-36	171116-4	220
17	X-111183-01-17	171116-4	220	37	X-111183-01-37	171116-4	220
18	X-111183-01-18	171116-4	220	38	X-111183-01-38	171116-4	220
19	X-111183-01-19	171116-4	220	39	X-111183-01-39	171116-4	220
20	X-111183-01-20	171116-4	220	40	X-111183-01-40	171116-4	220
Sketch:							
Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm						
Acceptable Hardness	197HBW-235HBW	Approved by:			Inspected by:		
Judgments:	[V] Conform	Wu Xu Zhong			Fu Wei Ming		
	[] Do not conform						

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

Hardness Test Report

Serial No:	X-111183-01-01...150	PO# // Item	LB17-266-2	Date:	2017-9-26		
Part No:	LSTM710CAMERON	API Monogram	YES	Report#:			
Specification	API Spec 6A/ LU PSL3 PR1	Material:	410 75k	Coating:			
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE			Qty:	150 EA		
Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
41	X-111183-01-41	171116-4	220	61	X-111183-01-61	171116-4	220
42	X-111183-01-42	171116-4	220	62	X-111183-01-62	171116-4	220
43	X-111183-01-43	171116-4	220	63	X-111183-01-63	171116-4	220
44	X-111183-01-44	171116-4	220	64	X-111183-01-64	171116-4	220
45	X-111183-01-45	171116-4	220	65	X-111183-01-65	171116-4	220
46	X-111183-01-46	171116-4	220	66	X-111183-01-66	171116-4	220
47	X-111183-01-47	171116-4	220	67	X-111183-01-67	171116-4	220
48	X-111183-01-48	171116-4	220	68	X-111183-01-68	171116-4	220
49	X-111183-01-49	171116-4	220	69	X-111183-01-69	171116-4	220
50	X-111183-01-50	171116-4	220	70	X-111183-01-70	171116-4	220
51	X-111183-01-51	171116-4	220	71	X-111183-01-71	171116-4	220
52	X-111183-01-52	171116-4	220	72	X-111183-01-72	171116-4	220
53	X-111183-01-53	171116-4	220	73	X-111183-01-73	171116-4	220
54	X-111183-01-54	171116-4	220	74	X-111183-01-74	171116-4	220
55	X-111183-01-55	171116-4	220	75	X-111183-01-75	171116-4	220
56	X-111183-01-56	171116-4	220	76	X-111183-01-76	171116-4	220
57	X-111183-01-57	171116-4	220	77	X-111183-01-77	171116-4	220
58	X-111183-01-58	171116-4	220	78	X-111183-01-78	171116-4	220
59	X-111183-01-59	171116-4	220	79	X-111183-01-79	171116-4	220
60	X-111183-01-60	171116-4	220	80	X-111183-01-80	171116-4	220
Sketch:							
Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm						
Acceptable Hardness	197HBW-235HBW		Approved by:			Inspected by:	
Judgments:	[V] Conform		Wu Xu Zhong			Fu Wei Ming	
	[] Do not conform						

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

Hardness Test Report

Serial No:	X-111183-01-01...150	PO# // Item	LB17-266-2	Date:	2017-9-26		
Part No:	LSTM710CAMERON	API Monogram	YES	Report#:			
Specification	API Spec 6A/ LU PSL3 PR1	Material:	410 75k	Coating:			
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE			Qty:	150 EA		
Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
81	X-111183-01-81	171116-4	220	101	X-111183-01-101	171116-4	220
82	X-111183-01-82	171116-4	220	102	X-111183-01-102	171116-4	220
83	X-111183-01-83	171116-4	220	103	X-111183-01-103	171116-4	220
84	X-111183-01-84	171116-4	220	104	X-111183-01-104	171116-4	220
85	X-111183-01-85	171116-4	220	105	X-111183-01-105	171116-4	220
86	X-111183-01-86	171116-4	220	106	X-111183-01-106	171116-4	220
87	X-111183-01-87	171116-4	220	107	X-111183-01-107	171116-4	220
88	X-111183-01-88	171116-4	220	108	X-111183-01-108	171116-4	220
89	X-111183-01-89	171116-4	220	109	X-111183-01-109	171116-4	220
90	X-111183-01-90	171116-4	220	110	X-111183-01-110	171116-4	220
91	X-111183-01-91	171116-4	220	111	X-111183-01-111	171116-4	220
92	X-111183-01-92	171116-4	220	112	X-111183-01-112	171116-4	220
93	X-111183-01-93	171116-4	220	113	X-111183-01-113	171116-4	220
94	X-111183-01-94	171116-4	220	114	X-111183-01-114	171116-4	220
95	X-111183-01-95	171116-4	220	115	X-111183-01-115	171116-4	220
96	X-111183-01-96	171116-4	220	116	X-111183-01-116	171116-4	220
97	X-111183-01-97	171116-4	220	117	X-111183-01-117	171116-4	220
98	X-111183-01-98	171116-4	220	118	X-111183-01-118	171116-4	220
99	X-111183-01-99	171116-4	220	119	X-111183-01-119	171116-4	220
100	X-111183-01-100	171116-4	220	120	X-111183-01-120	171116-4	220
Sketch:							
Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm						
Acceptable Hardness	197HBW-235HBW		Approved by:			Inspected by:	
Judgments:	[V] Conform		Wu Xu Zhong			Fu Wei Ming	
	[] Do not conform						

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

Hardness Test Report

Serial No:	X-111183-01-01...150	PO# // Item	LB17-266-2	Date:	2017-9-26		
Part No:	LSTM710CAMERON	API Monogram	YES	Report#:			
Specification	API Spec 6A/ LU PSL3 PR1	Material:	410 75k	Coating:			
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE			Qty:	150 EA		
Item	S/N	Heat Lot No.	Hardness	Item	S/N	Heat Lot No.	Hardness
121	X-111183-01-121	171116-4	220	141	X-111183-01-141	171116-4	220
122	X-111183-01-122	171116-4	220	142	X-111183-01-142	171116-4	220
123	X-111183-01-123	171116-4	220	143	X-111183-01-143	171116-4	220
124	X-111183-01-124	171116-4	220	144	X-111183-01-144	171116-4	220
125	X-111183-01-125	171116-4	220	145	X-111183-01-145	171116-4	220
126	X-111183-01-126	171116-4	220	146	X-111183-01-146	171116-4	220
127	X-111183-01-127	171116-4	220	147	X-111183-01-147	171116-4	220
128	X-111183-01-128	171116-4	220	148	X-111183-01-148	171116-4	220
129	X-111183-01-129	171116-4	220	149	X-111183-01-149	171116-4	220
130	X-111183-01-130	171116-4	220	150	X-111183-01-150	171116-4	220
131	X-111183-01-131	171116-4	220				
132	X-111183-01-132	171116-4	220				
133	X-111183-01-133	171116-4	220				
134	X-111183-01-134	171116-4	220				
135	X-111183-01-135	171116-4	220				
136	X-111183-01-136	171116-4	220				
137	X-111183-01-137	171116-4	220				
138	X-111183-01-138	171116-4	220				
139	X-111183-01-139	171116-4	220				
140	X-111183-01-140	171116-4	220				
Sketch:							
Method Used:	Impact Energy:3000Kg. Diameter of steel ball:10mm						
Acceptable Hardness	197HBW-235HBW	Approved by:			Inspected by:		
Judgments:	[V] Conform	Wu Xu Zhong			Fu Wei Ming		
	[] Do not conform						

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

ULTRASONIC EXAMINATION REPORT

Serial No:	X-111183-01-01...150	PO# // Item	LB17-266-2	Date:	2017-9-26		
Part No:	LSTM710CAMERON	API Monogram	YES	Report#:			
Specification	API Spec 6A/ LU PSL3 PR1	Material:	410 75k	Coating:			
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE			Qty:	150 EA		
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	X-111183-01-01	171116-4	Acceptable	21	X-111183-01-21	171116-4	Acceptable
2	X-111183-01-02	171116-4	Acceptable	22	X-111183-01-22	171116-4	Acceptable
3	X-111183-01-03	171116-4	Acceptable	23	X-111183-01-23	171116-4	Acceptable
4	X-111183-01-04	171116-4	Acceptable	24	X-111183-01-24	171116-4	Acceptable
5	X-111183-01-05	171116-4	Acceptable	25	X-111183-01-25	171116-4	Acceptable
6	X-111183-01-06	171116-4	Acceptable	26	X-111183-01-26	171116-4	Acceptable
7	X-111183-01-07	171116-4	Acceptable	27	X-111183-01-27	171116-4	Acceptable
8	X-111183-01-08	171116-4	Acceptable	28	X-111183-01-28	171116-4	Acceptable
9	X-111183-01-09	171116-4	Acceptable	29	X-111183-01-29	171116-4	Acceptable
10	X-111183-01-10	171116-4	Acceptable	30	X-111183-01-30	171116-4	Acceptable
11	X-111183-01-11	171116-4	Acceptable	31	X-111183-01-31	171116-4	Acceptable
12	X-111183-01-12	171116-4	Acceptable	32	X-111183-01-32	171116-4	Acceptable
13	X-111183-01-13	171116-4	Acceptable	33	X-111183-01-33	171116-4	Acceptable
14	X-111183-01-14	171116-4	Acceptable	34	X-111183-01-34	171116-4	Acceptable
15	X-111183-01-15	171116-4	Acceptable	35	X-111183-01-35	171116-4	Acceptable
16	X-111183-01-16	171116-4	Acceptable	36	X-111183-01-36	171116-4	Acceptable
17	X-111183-01-17	171116-4	Acceptable	37	X-111183-01-37	171116-4	Acceptable
18	X-111183-01-18	171116-4	Acceptable	38	X-111183-01-38	171116-4	Acceptable
19	X-111183-01-19	171116-4	Acceptable	39	X-111183-01-39	171116-4	Acceptable
20	X-111183-01-20	171116-4	Acceptable	40	X-111183-01-40	171116-4	Acceptable
Sketch:							
UT Code:ASME SECTION 5			Technique:Straight/Contact		Examined BY:		Approved by:
Exam.Stage:Rough After Ra ≤6.3 μm			Calibration Block:CSK IA		Wei Ming		Wei Ming
Equipment:CTS-2020			Couplant: OIL				
Probe Used :2.5P φ10			Acceptance Criteria: API 6A PSL 3		Level as per UT II		Level as per UT III
Equipment Expiration date :2017.9			Test Gain:20db + 5 db				

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

ULTRASONIC EXAMINATION REPORT

Serial No:	X-111183-01-01...150			PO# // Item	LB17-266-2	Date:	2017-9-26
Part No:	LSTM710CAMERON			API Monogram	YES	Report#:	
Specification	API Spec 6A/ LU PSL3 PR1			Material:	410 75k	Coating:	
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE					Qty:	150 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
41	X-111183-01-41	171116-4	Acceptable	61	X-111183-01-61	171116-4	Acceptable
42	X-111183-01-42	171116-4	Acceptable	62	X-111183-01-62	171116-4	Acceptable
43	X-111183-01-43	171116-4	Acceptable	63	X-111183-01-63	171116-4	Acceptable
44	X-111183-01-44	171116-4	Acceptable	64	X-111183-01-64	171116-4	Acceptable
45	X-111183-01-45	171116-4	Acceptable	65	X-111183-01-65	171116-4	Acceptable
46	X-111183-01-46	171116-4	Acceptable	66	X-111183-01-66	171116-4	Acceptable
47	X-111183-01-47	171116-4	Acceptable	67	X-111183-01-67	171116-4	Acceptable
48	X-111183-01-48	171116-4	Acceptable	68	X-111183-01-68	171116-4	Acceptable
49	X-111183-01-49	171116-4	Acceptable	69	X-111183-01-69	171116-4	Acceptable
50	X-111183-01-50	171116-4	Acceptable	70	X-111183-01-70	171116-4	Acceptable
51	X-111183-01-51	171116-4	Acceptable	71	X-111183-01-71	171116-4	Acceptable
52	X-111183-01-52	171116-4	Acceptable	72	X-111183-01-72	171116-4	Acceptable
53	X-111183-01-53	171116-4	Acceptable	73	X-111183-01-73	171116-4	Acceptable
54	X-111183-01-54	171116-4	Acceptable	74	X-111183-01-74	171116-4	Acceptable
55	X-111183-01-55	171116-4	Acceptable	75	X-111183-01-75	171116-4	Acceptable
56	X-111183-01-56	171116-4	Acceptable	76	X-111183-01-76	171116-4	Acceptable
57	X-111183-01-57	171116-4	Acceptable	77	X-111183-01-77	171116-4	Acceptable
58	X-111183-01-58	171116-4	Acceptable	78	X-111183-01-78	171116-4	Acceptable
59	X-111183-01-59	171116-4	Acceptable	79	X-111183-01-79	171116-4	Acceptable
60	X-111183-01-60	171116-4	Acceptable	80	X-111183-01-80	171116-4	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	Wei Ming	Wei Ming
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2017.9	Test Gain:20db + 5 db		
		Level as per UT II	Level as per UT III

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

ULTRASONIC EXAMINATION REPORT

Serial No:	X-111183-01-01...150			PO# // Item	LB17-266-2	Date:	2017-9-26
Part No:	LSTM710CAMERON			API Monogram	YES	Report#:	
Specification	API Spec 6A/ LU PSL3 PR1			Material:	410 75k	Coating:	
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE					Qty:	150 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
81	X-111183-01-81	171116-4	Acceptable	101	X-111183-01-101	171116-4	Acceptable
82	X-111183-01-82	171116-4	Acceptable	102	X-111183-01-102	171116-4	Acceptable
83	X-111183-01-83	171116-4	Acceptable	103	X-111183-01-103	171116-4	Acceptable
84	X-111183-01-84	171116-4	Acceptable	104	X-111183-01-104	171116-4	Acceptable
85	X-111183-01-85	171116-4	Acceptable	105	X-111183-01-105	171116-4	Acceptable
86	X-111183-01-86	171116-4	Acceptable	106	X-111183-01-106	171116-4	Acceptable
87	X-111183-01-87	171116-4	Acceptable	107	X-111183-01-107	171116-4	Acceptable
88	X-111183-01-88	171116-4	Acceptable	108	X-111183-01-108	171116-4	Acceptable
89	X-111183-01-89	171116-4	Acceptable	109	X-111183-01-109	171116-4	Acceptable
90	X-111183-01-90	171116-4	Acceptable	110	X-111183-01-110	171116-4	Acceptable
91	X-111183-01-91	171116-4	Acceptable	111	X-111183-01-111	171116-4	Acceptable
92	X-111183-01-92	171116-4	Acceptable	112	X-111183-01-112	171116-4	Acceptable
93	X-111183-01-93	171116-4	Acceptable	113	X-111183-01-113	171116-4	Acceptable
94	X-111183-01-94	171116-4	Acceptable	114	X-111183-01-114	171116-4	Acceptable
95	X-111183-01-95	171116-4	Acceptable	115	X-111183-01-115	171116-4	Acceptable
96	X-111183-01-96	171116-4	Acceptable	116	X-111183-01-116	171116-4	Acceptable
97	X-111183-01-97	171116-4	Acceptable	117	X-111183-01-117	171116-4	Acceptable
98	X-111183-01-98	171116-4	Acceptable	118	X-111183-01-118	171116-4	Acceptable
99	X-111183-01-99	171116-4	Acceptable	119	X-111183-01-119	171116-4	Acceptable
100	X-111183-01-100	171116-4	Acceptable	120	X-111183-01-120	171116-4	Acceptable

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	Wei Ming	Wei Ming
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2017.9	Test Gain:20db + 5 db		
		Level as per UT II	Level as per UT III

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

ULTRASONIC EXAMINATION REPORT

Serial No:	X-111183-01-01...150			PO# // Item	LB17-266-2	Date:	2017-9-26
Part No:	LSTM710CAMERON			API Monogram	YES	Report#:	
Specification	API Spec 6A/ LU PSL3 PR1			Material:	410 75k	Coating:	
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE					Qty:	150 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
121	X-111183-01-121	171116-4	Acceptable	141	X-111183-01-141	171116-4	Acceptable
122	X-111183-01-122	171116-4	Acceptable	142	X-111183-01-142	171116-4	Acceptable
123	X-111183-01-123	171116-4	Acceptable	143	X-111183-01-143	171116-4	Acceptable
124	X-111183-01-124	171116-4	Acceptable	144	X-111183-01-144	171116-4	Acceptable
125	X-111183-01-125	171116-4	Acceptable	145	X-111183-01-145	171116-4	Acceptable
126	X-111183-01-126	171116-4	Acceptable	146	X-111183-01-146	171116-4	Acceptable
127	X-111183-01-127	171116-4	Acceptable	147	X-111183-01-147	171116-4	Acceptable
128	X-111183-01-128	171116-4	Acceptable	148	X-111183-01-148	171116-4	Acceptable
129	X-111183-01-129	171116-4	Acceptable	149	X-111183-01-149	171116-4	Acceptable
130	X-111183-01-130	171116-4	Acceptable	150	X-111183-01-150	171116-4	Acceptable
131	X-111183-01-131	171116-4	Acceptable				
132	X-111183-01-132	171116-4	Acceptable				
133	X-111183-01-133	171116-4	Acceptable				
134	X-111183-01-134	171116-4	Acceptable				
135	X-111183-01-135	171116-4	Acceptable				
136	X-111183-01-136	171116-4	Acceptable				
137	X-111183-01-137	171116-4	Acceptable				
138	X-111183-01-138	171116-4	Acceptable				
139	X-111183-01-139	171116-4	Acceptable				
140	X-111183-01-140	171116-4	Acceptable				

Sketch:

UT Code:ASME SECTION 5	Technique:Straight/Contact	Examined BY:	Approved by:
Exam.Stage:Rough After Ra $\leq 6.3 \mu\text{m}$	Calibration Block:CSK IA	Wei Ming	Wei Ming
Equipment:CTS-2020	Couplant: OIL		
Probe Used :2.5P $\phi 10$	Acceptance Criteria: API 6A PSL 3		
Equipment Expiration date :2017.9	Test Gain:20db + 5 db		
		Level as per UT II	Level as per UT III

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

Magnetic Particle Inspection Report

Serial No:	X-111183-01-01...150			PO# // Item	LB17-266-2	Date:	2017-9-26
Part No:	LSTM710CAMERON			API Monogram	YES	Report#:	
Specification	API Spec 6A/ LU PSL3 PR1			Material:	410 75k	Coating:	
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE					Qty:	150 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
1	X-111183-01-01	171116-4	Acceptable	21	X-111183-01-21	171116-4	Acceptable
2	X-111183-01-02	171116-4	Acceptable	22	X-111183-01-22	171116-4	Acceptable
3	X-111183-01-03	171116-4	Acceptable	23	X-111183-01-23	171116-4	Acceptable
4	X-111183-01-04	171116-4	Acceptable	24	X-111183-01-24	171116-4	Acceptable
5	X-111183-01-05	171116-4	Acceptable	25	X-111183-01-25	171116-4	Acceptable
6	X-111183-01-06	171116-4	Acceptable	26	X-111183-01-26	171116-4	Acceptable
7	X-111183-01-07	171116-4	Acceptable	27	X-111183-01-27	171116-4	Acceptable
8	X-111183-01-08	171116-4	Acceptable	28	X-111183-01-28	171116-4	Acceptable
9	X-111183-01-09	171116-4	Acceptable	29	X-111183-01-29	171116-4	Acceptable
10	X-111183-01-10	171116-4	Acceptable	30	X-111183-01-30	171116-4	Acceptable
11	X-111183-01-11	171116-4	Acceptable	31	X-111183-01-31	171116-4	Acceptable
12	X-111183-01-12	171116-4	Acceptable	32	X-111183-01-32	171116-4	Acceptable
13	X-111183-01-13	171116-4	Acceptable	33	X-111183-01-33	171116-4	Acceptable
14	X-111183-01-14	171116-4	Acceptable	34	X-111183-01-34	171116-4	Acceptable
15	X-111183-01-15	171116-4	Acceptable	35	X-111183-01-35	171116-4	Acceptable
16	X-111183-01-16	171116-4	Acceptable	36	X-111183-01-36	171116-4	Acceptable
17	X-111183-01-17	171116-4	Acceptable	37	X-111183-01-37	171116-4	Acceptable
18	X-111183-01-18	171116-4	Acceptable	38	X-111183-01-38	171116-4	Acceptable
19	X-111183-01-19	171116-4	Acceptable	39	X-111183-01-39	171116-4	Acceptable
20	X-111183-01-20	171116-4	Acceptable	40	X-111183-01-40	171116-4	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: Wei Ming Level as per MT II	Approved by: Wei Ming Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

Magnetic Particle Inspection Report

Serial No:	X-111183-01-01...150			PO# // Item	LB17-266-2	Date:	2017-9-26
Part No:	LSTM710CAMERON			API Monogram	YES	Report#:	
Specification	API Spec 6A/ LU PSL3 PR1			Material:	410 75k	Coating:	
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE					Qty:	150 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
41	X-111183-01-41	171116-4	Acceptable	61	X-111183-01-61	171116-4	Acceptable
42	X-111183-01-42	171116-4	Acceptable	62	X-111183-01-62	171116-4	Acceptable
43	X-111183-01-43	171116-4	Acceptable	63	X-111183-01-63	171116-4	Acceptable
44	X-111183-01-44	171116-4	Acceptable	64	X-111183-01-64	171116-4	Acceptable
45	X-111183-01-45	171116-4	Acceptable	65	X-111183-01-65	171116-4	Acceptable
46	X-111183-01-46	171116-4	Acceptable	66	X-111183-01-66	171116-4	Acceptable
47	X-111183-01-47	171116-4	Acceptable	67	X-111183-01-67	171116-4	Acceptable
48	X-111183-01-48	171116-4	Acceptable	68	X-111183-01-68	171116-4	Acceptable
49	X-111183-01-49	171116-4	Acceptable	69	X-111183-01-69	171116-4	Acceptable
50	X-111183-01-50	171116-4	Acceptable	70	X-111183-01-70	171116-4	Acceptable
51	X-111183-01-51	171116-4	Acceptable	71	X-111183-01-71	171116-4	Acceptable
52	X-111183-01-52	171116-4	Acceptable	72	X-111183-01-72	171116-4	Acceptable
53	X-111183-01-53	171116-4	Acceptable	73	X-111183-01-73	171116-4	Acceptable
54	X-111183-01-54	171116-4	Acceptable	74	X-111183-01-74	171116-4	Acceptable
55	X-111183-01-55	171116-4	Acceptable	75	X-111183-01-75	171116-4	Acceptable
56	X-111183-01-56	171116-4	Acceptable	76	X-111183-01-76	171116-4	Acceptable
57	X-111183-01-57	171116-4	Acceptable	77	X-111183-01-77	171116-4	Acceptable
58	X-111183-01-58	171116-4	Acceptable	78	X-111183-01-78	171116-4	Acceptable
59	X-111183-01-59	171116-4	Acceptable	79	X-111183-01-79	171116-4	Acceptable
60	X-111183-01-60	171116-4	Acceptable	80	X-111183-01-80	171116-4	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: Wei Ming Level as per MT II	Approved by: Wei Ming Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

Magnetic Particle Inspection Report

Serial No:	X-111183-01-01...150			PO# // Item	LB17-266-2	Date:	2017-9-26
Part No:	LSTM710CAMERON			API Monogram	YES	Report#:	
Specification	API Spec 6A/ LU PSL3 PR1			Material:	410 75k	Coating:	
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE					Qty:	150 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
81	X-111183-01-81	171116-4	Acceptable	101	X-111183-01-101	171116-4	Acceptable
82	X-111183-01-82	171116-4	Acceptable	102	X-111183-01-102	171116-4	Acceptable
83	X-111183-01-83	171116-4	Acceptable	103	X-111183-01-103	171116-4	Acceptable
84	X-111183-01-84	171116-4	Acceptable	104	X-111183-01-104	171116-4	Acceptable
85	X-111183-01-85	171116-4	Acceptable	105	X-111183-01-105	171116-4	Acceptable
86	X-111183-01-86	171116-4	Acceptable	106	X-111183-01-106	171116-4	Acceptable
87	X-111183-01-87	171116-4	Acceptable	107	X-111183-01-107	171116-4	Acceptable
88	X-111183-01-88	171116-4	Acceptable	108	X-111183-01-108	171116-4	Acceptable
89	X-111183-01-89	171116-4	Acceptable	109	X-111183-01-109	171116-4	Acceptable
90	X-111183-01-90	171116-4	Acceptable	110	X-111183-01-110	171116-4	Acceptable
91	X-111183-01-91	171116-4	Acceptable	111	X-111183-01-111	171116-4	Acceptable
92	X-111183-01-92	171116-4	Acceptable	112	X-111183-01-112	171116-4	Acceptable
93	X-111183-01-93	171116-4	Acceptable	113	X-111183-01-113	171116-4	Acceptable
94	X-111183-01-94	171116-4	Acceptable	114	X-111183-01-114	171116-4	Acceptable
95	X-111183-01-95	171116-4	Acceptable	115	X-111183-01-115	171116-4	Acceptable
96	X-111183-01-96	171116-4	Acceptable	116	X-111183-01-116	171116-4	Acceptable
97	X-111183-01-97	171116-4	Acceptable	117	X-111183-01-117	171116-4	Acceptable
98	X-111183-01-98	171116-4	Acceptable	118	X-111183-01-118	171116-4	Acceptable
99	X-111183-01-99	171116-4	Acceptable	119	X-111183-01-119	171116-4	Acceptable
100	X-111183-01-100	171116-4	Acceptable	120	X-111183-01-120	171116-4	Acceptable

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: Wei Ming Level as per MT II	Approved by: Wei Ming Level as per MT II
Test Method	Fulcrum [] Cable [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤ 6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		

SHANGHAI SHENGQIN PETROLEUM MACHINERY MANUFACTURE CO. , LTD

No. 2600 Lianxi Road, Xicen Town, Qindu District Shanghai China

Magnetic Particle Inspection Report

Serial No:	X-111183-01-01...150			PO# // Item	LB17-266-2	Date:	2017-9-26
Part No:	LSTM710CAMERON			API Monogram	YES	Report#:	
Specification	API Spec 6A/ LU PSL3 PR1			Material:	410 75k	Coating:	
Description:	LOWER STEM 7 1/16" 10 M, CAMERON STYLE					Qty:	150 EA
Item	S/N	Heat Lot No.	Result	Item	S/N	Heat Lot No.	Result
121	X-111183-01-121	171116-4	Acceptable	141	X-111183-01-141	171116-4	Acceptable
122	X-111183-01-122	171116-4	Acceptable	142	X-111183-01-142	171116-4	Acceptable
123	X-111183-01-123	171116-4	Acceptable	143	X-111183-01-143	171116-4	Acceptable
124	X-111183-01-124	171116-4	Acceptable	144	X-111183-01-144	171116-4	Acceptable
125	X-111183-01-125	171116-4	Acceptable	145	X-111183-01-145	171116-4	Acceptable
126	X-111183-01-126	171116-4	Acceptable	146	X-111183-01-146	171116-4	Acceptable
127	X-111183-01-127	171116-4	Acceptable	147	X-111183-01-147	171116-4	Acceptable
128	X-111183-01-128	171116-4	Acceptable	148	X-111183-01-148	171116-4	Acceptable
129	X-111183-01-129	171116-4	Acceptable	149	X-111183-01-149	171116-4	Acceptable
130	X-111183-01-130	171116-4	Acceptable	150	X-111183-01-150	171116-4	Acceptable
131	X-111183-01-131	171116-4	Acceptable				
132	X-111183-01-132	171116-4	Acceptable				
133	X-111183-01-133	171116-4	Acceptable				
134	X-111183-01-134	171116-4	Acceptable				
135	X-111183-01-135	171116-4	Acceptable				
136	X-111183-01-136	171116-4	Acceptable				
137	X-111183-01-137	171116-4	Acceptable				
138	X-111183-01-138	171116-4	Acceptable				
139	X-111183-01-139	171116-4	Acceptable				
140	X-111183-01-140	171116-4	Acceptable				

Sketch/Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surface

Evaluation & Disposition : Found to be satisfactory.

Equipment	CJD -9000			Examined BY: Wei Ming Level as per MT II	Approved by: Wei Ming Level as per MT II
Test Method	Fulcrum [] Cablel [√]	Particle Type	Fluorescence Wet		
Exam. Stage	Rough After Ra ≤6.3μm	Test Piece	A1-30/100		
Magnetizing time	1-3S	Circular AMPS/Turns	900A/1		
Concentration	0.3ml/100ml	UV-Light Intensity	≥1000Uw/C m²		

DRAWING # X-111180-01

REPORT INDEX

Purchase Order: 2022203

Quantity: 100PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (X-111180-01)	Page - 2
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1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 5
2.3	Tungsten carbide spray report	Page - 7
2.4	Penetrate testing report	Page - 8

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2022.8.30
Drawing #:	X-111180-01	Specification:	API 6A/ASTM A370	API Monogram:	No
Report #:	SO-20220830-01				
Part No.:		Material:	410 SS, Per NACE MR0175	Coating:	TC
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3				Quantity: 100

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	590	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
B3204858			0.14	0.52	0.31	0.001	0.023	0.41	/	/	11.85	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY J(ft.lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2208026-01			590	700	23	67	224			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	720°C 6h AIR	Temper1:	720°C 6h AIR
Temper2:	680°C 6h AIR	Temper2:	680°C 6h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

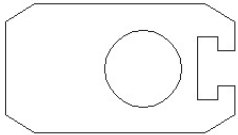
*We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.*

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.8.30	
Drawing #:	X-111180-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220830-01
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3					Quantity:	100
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22203-4-001	B3204858	229	26	SO22203-4-026	B3204858	219
2	SO22203-4-002	B3204858	207	27	SO22203-4-027	B3204858	218
3	SO22203-4-003	B3204858	207	28	SO22203-4-028	B3204858	217
4	SO22203-4-004	B3204858	232	29	SO22203-4-029	B3204858	235
5	SO22203-4-005	B3204858	229	30	SO22203-4-030	B3204858	222
6	SO22203-4-006	B3204858	234	31	SO22203-4-031	B3204858	228
7	SO22203-4-007	B3204858	207	32	SO22203-4-032	B3204858	229
8	SO22203-4-008	B3204858	229	33	SO22203-4-033	B3204858	228
9	SO22203-4-009	B3204858	225	34	SO22203-4-034	B3204858	235
10	SO22203-4-010	B3204858	231	35	SO22203-4-035	B3204858	234
11	SO22203-4-011	B3204858	212	36	SO22203-4-036	B3204858	207
12	SO22203-4-012	B3204858	218	37	SO22203-4-037	B3204858	230
13	SO22203-4-013	B3204858	210	38	SO22203-4-038	B3204858	207
14	SO22203-4-014	B3204858	215	39	SO22203-4-039	B3204858	232
15	SO22203-4-015	B3204858	214	40	SO22203-4-040	B3204858	234
16	SO22203-4-016	B3204858	223	41	SO22203-4-041	B3204858	235
17	SO22203-4-017	B3204858	232	42	SO22203-4-042	B3204858	218
18	SO22203-4-018	B3204858	224	43	SO22203-4-043	B3204858	229
19	SO22203-4-019	B3204858	210	44	SO22203-4-044	B3204858	207
20	SO22203-4-020	B3204858	211	45	SO22203-4-045	B3204858	224
21	SO22203-4-021	B3204858	207	46	SO22203-4-046	B3204858	228
22	SO22203-4-022	B3204858	230	47	SO22203-4-047	B3204858	207
23	SO22203-4-023	B3204858	235	48	SO22203-4-048	B3204858	207
24	SO22203-4-024	B3204858	217	49	SO22203-4-049	B3204858	209
25	SO22203-4-025	B3204858	219	50	SO22203-4-050	B3204858	231

Sketch:

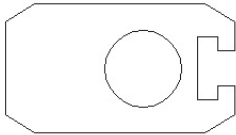


Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	☒ Conforms	JI WEI	Min Fukang
	☐ Does Not Conform		

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.8.30	
Drawing #:	X-111180-01	Specifica tion:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220830-01
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3					Quantity:	100
Item	S/N	Heat Log No.	Hardnes s	Item	S/N	Heat Log No.	Hardness
51	SO22203-4-051	B3204858	219	76	SO22203-4-076	B3204858	221
52	SO22203-4-052	B3204858	213	77	SO22203-4-077	B3204858	224
53	SO22203-4-053	B3204858	207	78	SO22203-4-078	B3204858	215
54	SO22203-4-054	B3204858	235	79	SO22203-4-079	B3204858	216
55	SO22203-4-055	B3204858	223	80	SO22203-4-080	B3204858	217
56	SO22203-4-056	B3204858	207	81	SO22203-4-081	B3204858	215
57	SO22203-4-057	B3204858	218	82	SO22203-4-082	B3204858	226
58	SO22203-4-058	B3204858	234	83	SO22203-4-083	B3204858	212
59	SO22203-4-059	B3204858	225	84	SO22203-4-084	B3204858	222
60	SO22203-4-060	B3204858	217	85	SO22203-4-085	B3204858	214
61	SO22203-4-061	B3204858	225	86	SO22203-4-086	B3204858	222
62	SO22203-4-062	B3204858	217	87	SO22203-4-087	B3204858	207
63	SO22203-4-063	B3204858	212	88	SO22203-4-088	B3204858	210
64	SO22203-4-064	B3204858	222	89	SO22203-4-089	B3204858	222
65	SO22203-4-065	B3204858	211	90	SO22203-4-090	B3204858	213
66	SO22203-4-066	B3204858	215	91	SO22203-4-091	B3204858	221
67	SO22203-4-067	B3204858	212	92	SO22203-4-092	B3204858	210
68	SO22203-4-068	B3204858	217	93	SO22203-4-093	B3204858	222
69	SO22203-4-069	B3204858	219	94	SO22203-4-094	B3204858	217
70	SO22203-4-070	B3204858	214	95	SO22203-4-095	B3204858	214
71	SO22203-4-071	B3204858	232	96	SO22203-4-096	B3204858	211
72	SO22203-4-072	B3204858	215	97	SO22203-4-097	B3204858	207
73	SO22203-4-073	B3204858	208	98	SO22203-4-098	B3204858	219
74	SO22203-4-074	B3204858	214	99	SO22203-4-099	B3204858	215
75	SO22203-4-075	B3204858	210	100	SO22203-4-100	B3204858	211

Sketch:



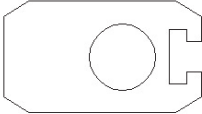
Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.12.23		
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2212-Q97		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3							Quantity:	100		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After fine finishing			Inspected surface:	GATE (body)						

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22203-4-001	B3204858	229	26	SO22203-4-026	B3204858	219
2	SO22203-4-002	B3204858	207	27	SO22203-4-027	B3204858	218
3	SO22203-4-003	B3204858	207	28	SO22203-4-028	B3204858	217
4	SO22203-4-004	B3204858	232	29	SO22203-4-029	B3204858	235
5	SO22203-4-005	B3204858	229	30	SO22203-4-030	B3204858	222
6	SO22203-4-006	B3204858	234	31	SO22203-4-031	B3204858	228
7	SO22203-4-007	B3204858	207	32	SO22203-4-032	B3204858	229
8	SO22203-4-008	B3204858	229	33	SO22203-4-033	B3204858	228
9	SO22203-4-009	B3204858	225	34	SO22203-4-034	B3204858	235
10	SO22203-4-010	B3204858	231	35	SO22203-4-035	B3204858	234
11	SO22203-4-011	B3204858	212	36	SO22203-4-036	B3204858	207
12	SO22203-4-012	B3204858	218	37	SO22203-4-037	B3204858	230
13	SO22203-4-013	B3204858	210	38	SO22203-4-038	B3204858	207
14	SO22203-4-014	B3204858	215	39	SO22203-4-039	B3204858	232
15	SO22203-4-015	B3204858	214	40	SO22203-4-040	B3204858	234
16	SO22203-4-016	B3204858	223	41	SO22203-4-041	B3204858	235
17	SO22203-4-017	B3204858	232	42	SO22203-4-042	B3204858	218
18	SO22203-4-018	B3204858	224	43	SO22203-4-043	B3204858	229
19	SO22203-4-019	B3204858	210	44	SO22203-4-044	B3204858	207
20	SO22203-4-020	B3204858	211	45	SO22203-4-045	B3204858	224
21	SO22203-4-021	B3204858	207	46	SO22203-4-046	B3204858	228
22	SO22203-4-022	B3204858	230	47	SO22203-4-047	B3204858	207
23	SO22203-4-023	B3204858	235	48	SO22203-4-048	B3204858	207
24	SO22203-4-024	B3204858	217	49	SO22203-4-049	B3204858	209
25	SO22203-4-025	B3204858	219	50	SO22203-4-050	B3204858	231

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

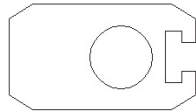
Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.12.23	

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.12.23		
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-221 2-Q97		
Part No.:			Material:	410 SS, Per NACE MR0175				Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3							Quantity:	100		
Equipment:	DPT-8		Acceptance Criteria:		API 6A/PSL3		Test Method:		DYE		
Penetrant Type:	Solvent		Penetration time:		15min		Developing time:		10min		
Stage:	After fine finishing				Inspected surface:		GATE (body)				

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22203-4-051	B3204858	219	76	SO22203-4-076	B3204858	221
52	SO22203-4-052	B3204858	213	77	SO22203-4-077	B3204858	224
53	SO22203-4-053	B3204858	207	78	SO22203-4-078	B3204858	215
54	SO22203-4-054	B3204858	235	79	SO22203-4-079	B3204858	216
55	SO22203-4-055	B3204858	223	80	SO22203-4-080	B3204858	217
56	SO22203-4-056	B3204858	207	81	SO22203-4-081	B3204858	215
57	SO22203-4-057	B3204858	218	82	SO22203-4-082	B3204858	226
58	SO22203-4-058	B3204858	234	83	SO22203-4-083	B3204858	212
59	SO22203-4-059	B3204858	225	84	SO22203-4-084	B3204858	222
60	SO22203-4-060	B3204858	217	85	SO22203-4-085	B3204858	214
61	SO22203-4-061	B3204858	225	86	SO22203-4-086	B3204858	222
62	SO22203-4-062	B3204858	217	87	SO22203-4-087	B3204858	207
63	SO22203-4-063	B3204858	212	88	SO22203-4-088	B3204858	210
64	SO22203-4-064	B3204858	222	89	SO22203-4-089	B3204858	222
65	SO22203-4-065	B3204858	211	90	SO22203-4-090	B3204858	213
66	SO22203-4-066	B3204858	215	91	SO22203-4-091	B3204858	221
67	SO22203-4-067	B3204858	212	92	SO22203-4-092	B3204858	210
68	SO22203-4-068	B3204858	217	93	SO22203-4-093	B3204858	222
69	SO22203-4-069	B3204858	219	94	SO22203-4-094	B3204858	217
70	SO22203-4-070	B3204858	214	95	SO22203-4-095	B3204858	214
71	SO22203-4-071	B3204858	232	96	SO22203-4-096	B3204858	211
72	SO22203-4-072	B3204858	215	97	SO22203-4-097	B3204858	207
73	SO22203-4-073	B3204858	208	98	SO22203-4-098	B3204858	219
74	SO22203-4-074	B3204858	214	99	SO22203-4-099	B3204858	215
75	SO22203-4-075	B3204858	210	100	SO22203-4-100	B3204858	211

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization :	QC Department		
NDT Level:	II	Date: 2022.12.23	

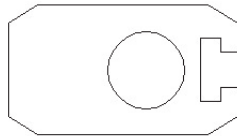
TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.12.24	
Drawing #:	X-111180-01	Specification :	API 6A		API Monogram:	No	Report #:	RS221224-01		
Part No.:		Material:	410 SS,Per NACE MR0175				Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3						Quantity:	100		
Dimension inspection										
ITEM	Hardness test		Bonding strength		Porosity		Coating type			
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4			
Actual	1171		77		0.77		WC86-Co10-Cr4			
Chemical component										
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)					
standard	5.1-6.0	9.0-11.0	3.0-5.0							
Actual	5.40	9.70	3.89							
Evaluation & Disposition:			Found to be satisfactory							
Inspected by:			SHI LINGUI							
Approved by:			JI WEI				Date:	2022.12.24		

PENETRATE TESTING REPORT

Customer:				Customer PO#:			Date:	2022.12.26
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No	Report #:	NCS-2212-H97	
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC	
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3					Quantity:	100	
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE			
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min			
Stage:	After coating tungsten carbide			Inspected surface:	GATE (spraying surface)			
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	SO22203-4-001	B3204858	229	26	SO22203-4-026	B3204858	219	
2	SO22203-4-002	B3204858	207	27	SO22203-4-027	B3204858	218	
3	SO22203-4-003	B3204858	207	28	SO22203-4-028	B3204858	217	
4	SO22203-4-004	B3204858	232	29	SO22203-4-029	B3204858	235	
5	SO22203-4-005	B3204858	229	30	SO22203-4-030	B3204858	222	
6	SO22203-4-006	B3204858	234	31	SO22203-4-031	B3204858	228	
7	SO22203-4-007	B3204858	207	32	SO22203-4-032	B3204858	229	
8	SO22203-4-008	B3204858	229	33	SO22203-4-033	B3204858	228	
9	SO22203-4-009	B3204858	225	34	SO22203-4-034	B3204858	235	
10	SO22203-4-010	B3204858	231	35	SO22203-4-035	B3204858	234	
11	SO22203-4-011	B3204858	212	36	SO22203-4-036	B3204858	207	
12	SO22203-4-012	B3204858	218	37	SO22203-4-037	B3204858	230	
13	SO22203-4-013	B3204858	210	38	SO22203-4-038	B3204858	207	
14	SO22203-4-014	B3204858	215	39	SO22203-4-039	B3204858	232	
15	SO22203-4-015	B3204858	214	40	SO22203-4-040	B3204858	234	
16	SO22203-4-016	B3204858	223	41	SO22203-4-041	B3204858	235	
17	SO22203-4-017	B3204858	232	42	SO22203-4-042	B3204858	218	
18	SO22203-4-018	B3204858	224	43	SO22203-4-043	B3204858	229	
19	SO22203-4-019	B3204858	210	44	SO22203-4-044	B3204858	207	
20	SO22203-4-020	B3204858	211	45	SO22203-4-045	B3204858	224	
21	SO22203-4-021	B3204858	207	46	SO22203-4-046	B3204858	228	
22	SO22203-4-022	B3204858	230	47	SO22203-4-047	B3204858	207	
23	SO22203-4-023	B3204858	235	48	SO22203-4-048	B3204858	207	
24	SO22203-4-024	B3204858	217	49	SO22203-4-049	B3204858	209	
25	SO22203-4-025	B3204858	219	50	SO22203-4-050	B3204858	231	

Sketch/Inspection Coverage:



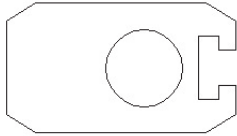
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.12.26	

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.12.26	
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No		Report #:	NCS-2212-H97		
Part No.:		Material:	410 SS, Per NACE MR0175				Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3						Quantity:	100		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE		
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min		
Stage:	After coating tungsten carbide			Inspected surface:	GATE(spraying surface)					
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness			
51	SO22203-4-051	B3204858	219	76	SO22203-4-076	B3204858	221			
52	SO22203-4-052	B3204858	213	77	SO22203-4-077	B3204858	224			
53	SO22203-4-053	B3204858	207	78	SO22203-4-078	B3204858	215			
54	SO22203-4-054	B3204858	235	79	SO22203-4-079	B3204858	216			
55	SO22203-4-055	B3204858	223	80	SO22203-4-080	B3204858	217			
56	SO22203-4-056	B3204858	207	81	SO22203-4-081	B3204858	215			
57	SO22203-4-057	B3204858	218	82	SO22203-4-082	B3204858	226			
58	SO22203-4-058	B3204858	234	83	SO22203-4-083	B3204858	212			
59	SO22203-4-059	B3204858	225	84	SO22203-4-084	B3204858	222			
60	SO22203-4-060	B3204858	217	85	SO22203-4-085	B3204858	214			
61	SO22203-4-061	B3204858	225	86	SO22203-4-086	B3204858	222			
62	SO22203-4-062	B3204858	217	87	SO22203-4-087	B3204858	207			
63	SO22203-4-063	B3204858	212	88	SO22203-4-088	B3204858	210			
64	SO22203-4-064	B3204858	222	89	SO22203-4-089	B3204858	222			
65	SO22203-4-065	B3204858	211	90	SO22203-4-090	B3204858	213			
66	SO22203-4-066	B3204858	215	91	SO22203-4-091	B3204858	221			
67	SO22203-4-067	B3204858	212	92	SO22203-4-092	B3204858	210			
68	SO22203-4-068	B3204858	217	93	SO22203-4-093	B3204858	222			
69	SO22203-4-069	B3204858	219	94	SO22203-4-094	B3204858	217			
70	SO22203-4-070	B3204858	214	95	SO22203-4-095	B3204858	214			
71	SO22203-4-071	B3204858	232	96	SO22203-4-096	B3204858	211			
72	SO22203-4-072	B3204858	215	97	SO22203-4-097	B3204858	207			
73	SO22203-4-073	B3204858	208	98	SO22203-4-098	B3204858	219			
74	SO22203-4-074	B3204858	214	99	SO22203-4-099	B3204858	215			
75	SO22203-4-075	B3204858	210	100	SO22203-4-100	B3204858	211			

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Ji LIN	Approved by:	Ji WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.12.26	

DRAWING # X-111180-01

REPORT INDEX

Purchase Order: 2022203

Quantity: 100PCS

Shipment No.:

Shipment Date:

Activity No.	Characteristics	Reference Page
1.1	DRAWING # (X-111180-01)	Page - 2
1.1.1	Metallurgical Test Certificate	Page - 2
1.1.2	Mechanical Testing	Page - 2
1.1.3	Chemical Testing	Page - 2
1.1.4	Heat Treatment	Page - 2
2.1	Hardness Test	Page - 3
2.2	Penetrate testing report	Page - 5
2.3	Tungsten carbide spray report	Page - 7
2.4	Penetrate testing report	Page - 8

METALLURGICAL TEST CERTIFICATE

Customer:		Customer PO#:		Date:	2022.8.30
Drawing #:	X-111180-01	Specification:	API 6A/ASTM A370	API Monogram:	No
Report #:	SO-20220830-01				
Part No.:		Material:	410 SS, Per NACE MR0175	Coating:	TC
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3				Quantity: 100

TEST CONDITION

Test Bar Size:	100*100*200	Bar Diameter:	Ø12.7
Melt Practice:	EF+LF+VD	Reduction Ratio Min.:	4.3:1
Yield Stress:	590	Gauge Length:	200

CHEMICAL COMPOSITION

Mill No.	Qty.	Test No.	C	Mn	Si	S	P	Ni	Cu	Mo	Cr	V
Spec. Min			0.08	/	/	/	/	/	/	/	11.50	-
Spec. Max			0.15	1.00	1.00	0.025	0.025	0.60	/	1.00	13.50	
B3204858			0.14	0.52	0.31	0.001	0.023	0.41	/	/	11.85	

MECHANICAL COMPOSITION

Heat No.	Quantity	Test No.	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %	Reduction of Area %	Hardness HB	10mm x 10mm CHARPY J(ft.lb) at -46°C	Minimum Lateral Expansion mm (inch)	Shear Fraction
Spec. Min			517	655	17	35	207	/		
Spec. Max			/	/	/	/	235	/		
HC2208026-01			590	700	23	67	224			

HEAT TREATMENT

Forgings		Test Bar (QTC)	
Normalized:	960°C 3h OIL	Normalized:	960°C 3h OIL
Quench:	/	Quench:	/
Temper1:	720°C 6h AIR	Temper1:	720°C 6h AIR
Temper2:	680°C 6h AIR	Temper2:	680°C 6h AIR
Start Temp.:	39°C	Start Temp.:	39°C
End Temp.:	51°C	End Temp.:	51°C

*We hereby certify that all test results and procedure information contained herein are correct and true as in contained the records of the company. There have been **no weld repairs** on these items.*

Inspected By:	Min Fukang	Approved By:	JI WEI

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.8.30	
Drawing #:	X-111180-01	Specification:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220830-01
Part No.:		Material:	410 SS, Per NACE MR0175			Coating:	TC
Description	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3					Quantity:	100
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22203-4-001	B3204858	229	26	SO22203-4-026	B3204858	219
2	SO22203-4-002	B3204858	207	27	SO22203-4-027	B3204858	218
3	SO22203-4-003	B3204858	207	28	SO22203-4-028	B3204858	217
4	SO22203-4-004	B3204858	232	29	SO22203-4-029	B3204858	235
5	SO22203-4-005	B3204858	229	30	SO22203-4-030	B3204858	222
6	SO22203-4-006	B3204858	234	31	SO22203-4-031	B3204858	228
7	SO22203-4-007	B3204858	207	32	SO22203-4-032	B3204858	229
8	SO22203-4-008	B3204858	229	33	SO22203-4-033	B3204858	228
9	SO22203-4-009	B3204858	225	34	SO22203-4-034	B3204858	235
10	SO22203-4-010	B3204858	231	35	SO22203-4-035	B3204858	234
11	SO22203-4-011	B3204858	212	36	SO22203-4-036	B3204858	207
12	SO22203-4-012	B3204858	218	37	SO22203-4-037	B3204858	230
13	SO22203-4-013	B3204858	210	38	SO22203-4-038	B3204858	207
14	SO22203-4-014	B3204858	215	39	SO22203-4-039	B3204858	232
15	SO22203-4-015	B3204858	214	40	SO22203-4-040	B3204858	234
16	SO22203-4-016	B3204858	223	41	SO22203-4-041	B3204858	235
17	SO22203-4-017	B3204858	232	42	SO22203-4-042	B3204858	218
18	SO22203-4-018	B3204858	224	43	SO22203-4-043	B3204858	229
19	SO22203-4-019	B3204858	210	44	SO22203-4-044	B3204858	207
20	SO22203-4-020	B3204858	211	45	SO22203-4-045	B3204858	224
21	SO22203-4-021	B3204858	207	46	SO22203-4-046	B3204858	228
22	SO22203-4-022	B3204858	230	47	SO22203-4-047	B3204858	207
23	SO22203-4-023	B3204858	235	48	SO22203-4-048	B3204858	207
24	SO22203-4-024	B3204858	217	49	SO22203-4-049	B3204858	209
25	SO22203-4-025	B3204858	219	50	SO22203-4-050	B3204858	231

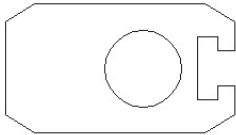
Sketch:

Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	☒ Conforms	JI WEI	Min Fukang
	☐ Does Not Conform		

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:		2022.8.30	
Drawing #:	X-111180-01	Specifica tion:	API 6A/ASTM E10	API Monogram:	No	Report #:	SO-20220830-01
Part No.:		Material:	410 SS,Per NACE MR0175			Coating:	TC
Description	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3					Quantity:	100
Item	S/N	Heat Log No.	Hardnes s	Item	S/N	Heat Log No.	Hardness
51	SO22203-4-051	B3204858	219	76	SO22203-4-076	B3204858	221
52	SO22203-4-052	B3204858	213	77	SO22203-4-077	B3204858	224
53	SO22203-4-053	B3204858	207	78	SO22203-4-078	B3204858	215
54	SO22203-4-054	B3204858	235	79	SO22203-4-079	B3204858	216
55	SO22203-4-055	B3204858	223	80	SO22203-4-080	B3204858	217
56	SO22203-4-056	B3204858	207	81	SO22203-4-081	B3204858	215
57	SO22203-4-057	B3204858	218	82	SO22203-4-082	B3204858	226
58	SO22203-4-058	B3204858	234	83	SO22203-4-083	B3204858	212
59	SO22203-4-059	B3204858	225	84	SO22203-4-084	B3204858	222
60	SO22203-4-060	B3204858	217	85	SO22203-4-085	B3204858	214
61	SO22203-4-061	B3204858	225	86	SO22203-4-086	B3204858	222
62	SO22203-4-062	B3204858	217	87	SO22203-4-087	B3204858	207
63	SO22203-4-063	B3204858	212	88	SO22203-4-088	B3204858	210
64	SO22203-4-064	B3204858	222	89	SO22203-4-089	B3204858	222
65	SO22203-4-065	B3204858	211	90	SO22203-4-090	B3204858	213
66	SO22203-4-066	B3204858	215	91	SO22203-4-091	B3204858	221
67	SO22203-4-067	B3204858	212	92	SO22203-4-092	B3204858	210
68	SO22203-4-068	B3204858	217	93	SO22203-4-093	B3204858	222
69	SO22203-4-069	B3204858	219	94	SO22203-4-094	B3204858	217
70	SO22203-4-070	B3204858	214	95	SO22203-4-095	B3204858	214
71	SO22203-4-071	B3204858	232	96	SO22203-4-096	B3204858	211
72	SO22203-4-072	B3204858	215	97	SO22203-4-097	B3204858	207
73	SO22203-4-073	B3204858	208	98	SO22203-4-098	B3204858	219
74	SO22203-4-074	B3204858	214	99	SO22203-4-099	B3204858	215
75	SO22203-4-075	B3204858	210	100	SO22203-4-100	B3204858	211

Sketch:



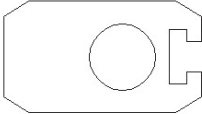
Method Used:			
Acceptable Hardness(HBW):	207-235	Approved By:	Examined By:
Judgments:	[☒] Conforms	JI WEI	Min Fukang
	[☐] Does Not Conform		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.12.23		
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2212-Q97		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3							Quantity:	100		
Equipment:	DPT-8		Acceptance Criteria:		API 6A/PSL3		Test Method:		DYE		
Penetrant Type:	Solvent		Penetration time:		15min		Developing time:		10min		
Stage:	After fine finishing				Inspected surface:		GATE (body)				

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	SO22203-4-001	B3204858	229	26	SO22203-4-026	B3204858	219
2	SO22203-4-002	B3204858	207	27	SO22203-4-027	B3204858	218
3	SO22203-4-003	B3204858	207	28	SO22203-4-028	B3204858	217
4	SO22203-4-004	B3204858	232	29	SO22203-4-029	B3204858	235
5	SO22203-4-005	B3204858	229	30	SO22203-4-030	B3204858	222
6	SO22203-4-006	B3204858	234	31	SO22203-4-031	B3204858	228
7	SO22203-4-007	B3204858	207	32	SO22203-4-032	B3204858	229
8	SO22203-4-008	B3204858	229	33	SO22203-4-033	B3204858	228
9	SO22203-4-009	B3204858	225	34	SO22203-4-034	B3204858	235
10	SO22203-4-010	B3204858	231	35	SO22203-4-035	B3204858	234
11	SO22203-4-011	B3204858	212	36	SO22203-4-036	B3204858	207
12	SO22203-4-012	B3204858	218	37	SO22203-4-037	B3204858	230
13	SO22203-4-013	B3204858	210	38	SO22203-4-038	B3204858	207
14	SO22203-4-014	B3204858	215	39	SO22203-4-039	B3204858	232
15	SO22203-4-015	B3204858	214	40	SO22203-4-040	B3204858	234
16	SO22203-4-016	B3204858	223	41	SO22203-4-041	B3204858	235
17	SO22203-4-017	B3204858	232	42	SO22203-4-042	B3204858	218
18	SO22203-4-018	B3204858	224	43	SO22203-4-043	B3204858	229
19	SO22203-4-019	B3204858	210	44	SO22203-4-044	B3204858	207
20	SO22203-4-020	B3204858	211	45	SO22203-4-045	B3204858	224
21	SO22203-4-021	B3204858	207	46	SO22203-4-046	B3204858	228
22	SO22203-4-022	B3204858	230	47	SO22203-4-047	B3204858	207
23	SO22203-4-023	B3204858	235	48	SO22203-4-048	B3204858	207
24	SO22203-4-024	B3204858	217	49	SO22203-4-049	B3204858	209
25	SO22203-4-025	B3204858	219	50	SO22203-4-050	B3204858	231

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

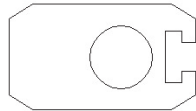
Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.12.23	

PENETRATE TESTING REPORT

Customer:		Customer PO#:		Date:	2022.12.23
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No
Report #:					NCS-221 2-Q97
Part No.:		Material:	410 SS, Per NACE MR0175		Coating:
					TC
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3				Quantity:
					100
Equipment:	DPT-8	Acceptance Criteria:	API 6A/PSL3	Test Method:	DYE
Penetrant Type:	Solvent	Penetration time:	15min	Developing time:	10min
Stage:	After fine finishing		Inspected surface:	GATE (body)	

Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
51	SO22203-4-051	B3204858	219	76	SO22203-4-076	B3204858	221
52	SO22203-4-052	B3204858	213	77	SO22203-4-077	B3204858	224
53	SO22203-4-053	B3204858	207	78	SO22203-4-078	B3204858	215
54	SO22203-4-054	B3204858	235	79	SO22203-4-079	B3204858	216
55	SO22203-4-055	B3204858	223	80	SO22203-4-080	B3204858	217
56	SO22203-4-056	B3204858	207	81	SO22203-4-081	B3204858	215
57	SO22203-4-057	B3204858	218	82	SO22203-4-082	B3204858	226
58	SO22203-4-058	B3204858	234	83	SO22203-4-083	B3204858	212
59	SO22203-4-059	B3204858	225	84	SO22203-4-084	B3204858	222
60	SO22203-4-060	B3204858	217	85	SO22203-4-085	B3204858	214
61	SO22203-4-061	B3204858	225	86	SO22203-4-086	B3204858	222
62	SO22203-4-062	B3204858	217	87	SO22203-4-087	B3204858	207
63	SO22203-4-063	B3204858	212	88	SO22203-4-088	B3204858	210
64	SO22203-4-064	B3204858	222	89	SO22203-4-089	B3204858	222
65	SO22203-4-065	B3204858	211	90	SO22203-4-090	B3204858	213
66	SO22203-4-066	B3204858	215	91	SO22203-4-091	B3204858	221
67	SO22203-4-067	B3204858	212	92	SO22203-4-092	B3204858	210
68	SO22203-4-068	B3204858	217	93	SO22203-4-093	B3204858	222
69	SO22203-4-069	B3204858	219	94	SO22203-4-094	B3204858	217
70	SO22203-4-070	B3204858	214	95	SO22203-4-095	B3204858	214
71	SO22203-4-071	B3204858	232	96	SO22203-4-096	B3204858	211
72	SO22203-4-072	B3204858	215	97	SO22203-4-097	B3204858	207
73	SO22203-4-073	B3204858	208	98	SO22203-4-098	B3204858	219
74	SO22203-4-074	B3204858	214	99	SO22203-4-099	B3204858	215
75	SO22203-4-075	B3204858	210	100	SO22203-4-100	B3204858	211

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization :	QC Department		
NDT Level:	II	Date: 2022.12.23	

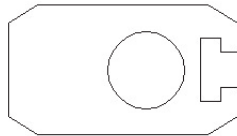
TUNGSTEN CARBIDE SPRAY REPORT

Customer:				Customer PO#:				Date:	2022.12.24	
Drawing #:	X-111180-01	Specification :	API 6A		API Monogram:	No	Report #:	RS221224-01		
Part No.:		Material:	410 SS,Per NACE MR0175				Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3						Quantity:	100		
Dimension inspection										
ITEM	Hardness test		Bonding strength		Porosity		Coating type			
Standard	≥1050		≥69MPa		MAX 1%		WC86-Co10-Cr4			
Actual	1171		77		0.77		WC86-Co10-Cr4			
Chemical component										
	C(%)	Co(%)	Cr(%)	Mn(%)	Ni(%)					
standard	5.1-6.0	9.0-11.0	3.0-5.0							
Actual	5.40	9.70	3.89							
Evaluation & Disposition:			Found to be satisfactory							
Inspected by:			SHI LINGUI							
Approved by:			JI WEI				Date:	2022.12.24		

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.12.26	
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165		API Monogram:	No		Report #:	NCS-2212-H97	
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC	
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3							Quantity:	100	
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE		
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min		
Stage:	After coating tungsten carbide			Inspected surface:	GATE (spraying surface)					
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness			
1	SO22203-4-001	B3204858	229	26	SO22203-4-026	B3204858	219			
2	SO22203-4-002	B3204858	207	27	SO22203-4-027	B3204858	218			
3	SO22203-4-003	B3204858	207	28	SO22203-4-028	B3204858	217			
4	SO22203-4-004	B3204858	232	29	SO22203-4-029	B3204858	235			
5	SO22203-4-005	B3204858	229	30	SO22203-4-030	B3204858	222			
6	SO22203-4-006	B3204858	234	31	SO22203-4-031	B3204858	228			
7	SO22203-4-007	B3204858	207	32	SO22203-4-032	B3204858	229			
8	SO22203-4-008	B3204858	229	33	SO22203-4-033	B3204858	228			
9	SO22203-4-009	B3204858	225	34	SO22203-4-034	B3204858	235			
10	SO22203-4-010	B3204858	231	35	SO22203-4-035	B3204858	234			
11	SO22203-4-011	B3204858	212	36	SO22203-4-036	B3204858	207			
12	SO22203-4-012	B3204858	218	37	SO22203-4-037	B3204858	230			
13	SO22203-4-013	B3204858	210	38	SO22203-4-038	B3204858	207			
14	SO22203-4-014	B3204858	215	39	SO22203-4-039	B3204858	232			
15	SO22203-4-015	B3204858	214	40	SO22203-4-040	B3204858	234			
16	SO22203-4-016	B3204858	223	41	SO22203-4-041	B3204858	235			
17	SO22203-4-017	B3204858	232	42	SO22203-4-042	B3204858	218			
18	SO22203-4-018	B3204858	224	43	SO22203-4-043	B3204858	229			
19	SO22203-4-019	B3204858	210	44	SO22203-4-044	B3204858	207			
20	SO22203-4-020	B3204858	211	45	SO22203-4-045	B3204858	224			
21	SO22203-4-021	B3204858	207	46	SO22203-4-046	B3204858	228			
22	SO22203-4-022	B3204858	230	47	SO22203-4-047	B3204858	207			
23	SO22203-4-023	B3204858	235	48	SO22203-4-048	B3204858	207			
24	SO22203-4-024	B3204858	217	49	SO22203-4-049	B3204858	209			
25	SO22203-4-025	B3204858	219	50	SO22203-4-050	B3204858	231			

Sketch/Inspection Coverage:



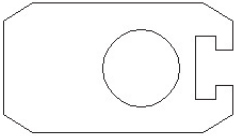
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date:	2022.12.26

PENETRATE TESTING REPORT

Customer:				Customer PO#:				Date:	2022.12.26		
Drawing #:	X-111180-01	Specification	API Spec 6A/ASTM E165	API Monogram:	No			Report #:	NCS-2212-H97		
Part No.:		Material:	410 SS, Per NACE MR0175					Coating:	TC		
Description:	Gate, 7 1/16" 10M manual, FLSR, 410 SS with TC. EE LU, PSL 3							Quantity:	100		
Equipment:	DPT-8	Acceptance Criteria:		API 6A/PSL3	Test Method:			DYE			
Penetrant Type:	Solvent	Penetration time:		15min	Developing time:			10min			
Stage:	After coating tungsten carbide			Inspected surface:	GATE(spraying surface)						
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness				
51	SO22203-4-051	B3204858	219	76	SO22203-4-076	B3204858	221				
52	SO22203-4-052	B3204858	213	77	SO22203-4-077	B3204858	224				
53	SO22203-4-053	B3204858	207	78	SO22203-4-078	B3204858	215				
54	SO22203-4-054	B3204858	235	79	SO22203-4-079	B3204858	216				
55	SO22203-4-055	B3204858	223	80	SO22203-4-080	B3204858	217				
56	SO22203-4-056	B3204858	207	81	SO22203-4-081	B3204858	215				
57	SO22203-4-057	B3204858	218	82	SO22203-4-082	B3204858	226				
58	SO22203-4-058	B3204858	234	83	SO22203-4-083	B3204858	212				
59	SO22203-4-059	B3204858	225	84	SO22203-4-084	B3204858	222				
60	SO22203-4-060	B3204858	217	85	SO22203-4-085	B3204858	214				
61	SO22203-4-061	B3204858	225	86	SO22203-4-086	B3204858	222				
62	SO22203-4-062	B3204858	217	87	SO22203-4-087	B3204858	207				
63	SO22203-4-063	B3204858	212	88	SO22203-4-088	B3204858	210				
64	SO22203-4-064	B3204858	222	89	SO22203-4-089	B3204858	222				
65	SO22203-4-065	B3204858	211	90	SO22203-4-090	B3204858	213				
66	SO22203-4-066	B3204858	215	91	SO22203-4-091	B3204858	221				
67	SO22203-4-067	B3204858	212	92	SO22203-4-092	B3204858	210				
68	SO22203-4-068	B3204858	217	93	SO22203-4-093	B3204858	222				
69	SO22203-4-069	B3204858	219	94	SO22203-4-094	B3204858	217				
70	SO22203-4-070	B3204858	214	95	SO22203-4-095	B3204858	214				
71	SO22203-4-071	B3204858	232	96	SO22203-4-096	B3204858	211				
72	SO22203-4-072	B3204858	215	97	SO22203-4-097	B3204858	207				
73	SO22203-4-073	B3204858	208	98	SO22203-4-098	B3204858	219				
74	SO22203-4-074	B3204858	214	99	SO22203-4-099	B3204858	215				
75	SO22203-4-075	B3204858	210	100	SO22203-4-100	B3204858	211				

Sketch/Inspection Coverage:



Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	JI LIN	Approved by:	JI WEI
Organization:	QC Department		
NDT Level:	II	Date: 2022.12.26	



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F001

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page - 3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F001

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1298	HYDRAULIC GATE VALVE		PFFY105/180-00	AP023F001	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
		Description			Melting Practice			Heat Treatment																
P/N	Parts	Melt No.	H.T. No.	Material Spec Standards	Q t y	Austenitized		Quenched		Temper(1)		Temper(2)												
						Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium						
PFFY105/180-00	BODY	TX21-01970	HY220814-2	AISI 4130 75K,Per ASTM A29	1	AP023002	Forging	880	5.5H	WATER	35	39	665	7.5H	AIR	/	/							
	UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023017	Forging	860	7.0H	WATER	27	39	680	8.0H	AIR	/	/							
	LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023022	Forging	860	6.5H	WATER	30	42	690	8.83H	AIR	/	/							
	STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023062	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023078	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	GATE	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	1	AP023113	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
	BODY BUSHING	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023101 AP023103	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Physical Properties				Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type		
																Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)				ROA (%)	
TX21-01970	HY220814-2	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	718	544	22.0	65.3	60/43/45	222HB	JBW-3008/ WDW-300
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	691	586	33.0	46.0	58/51/47	220HB	JBW-3008/ WDW-300
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	684	559	35.0	39.0	53/47/46	220HB	JBW-3008/ WDW-300
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/	/	/	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/	/	/	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	/	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	/	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



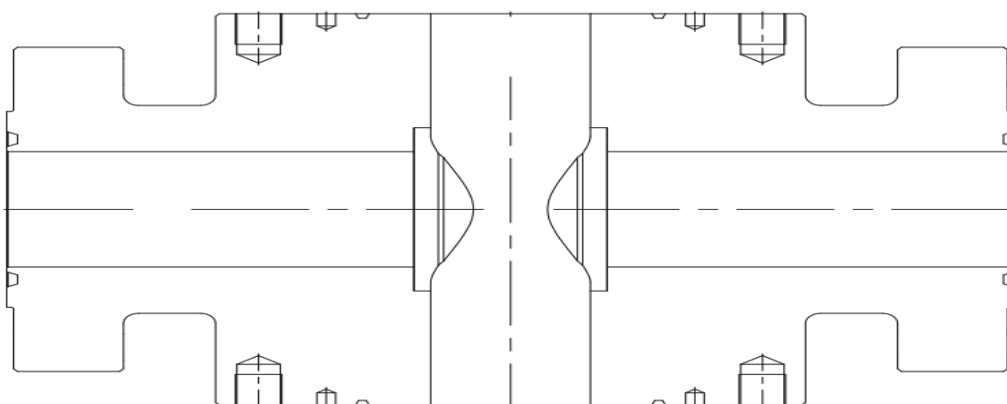
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0905-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023002	HY220814-2	227HB/229HB 229HB/220HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



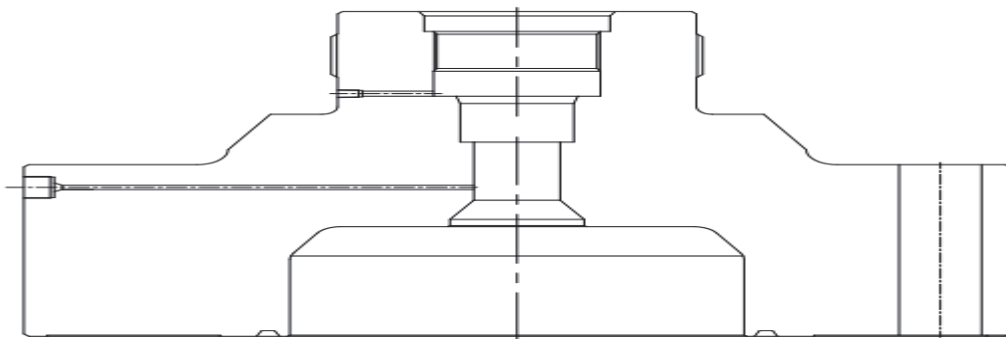
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0902-001
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023017	RC-08-30	212HB/212HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



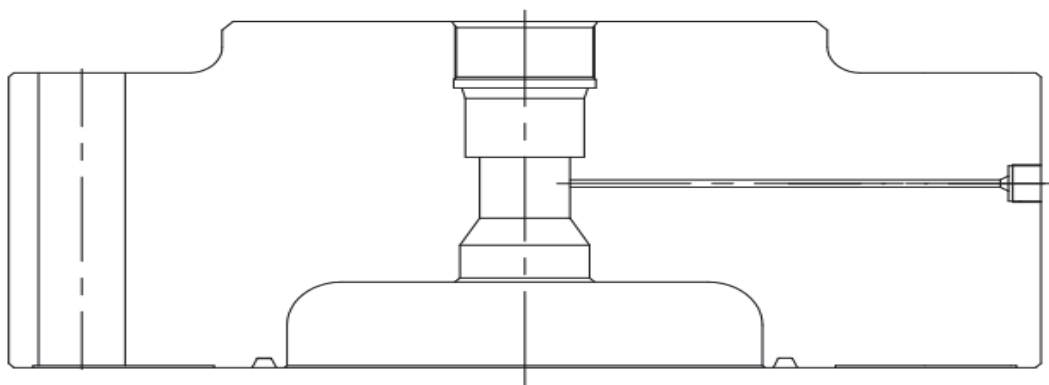
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0831-006
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023022	RC-08-22	200HB/200HB				

Sketch:



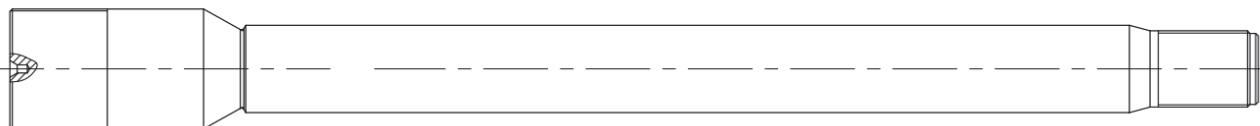
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]8



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 5Kg-f(49.03N).	Diameter of steel ball: 10mm	
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	WC		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023101	HC2207019-01	1197HV				
2	AP023103	HC2207019-01	1171HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N). Diameter of steel ball: 10mm						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



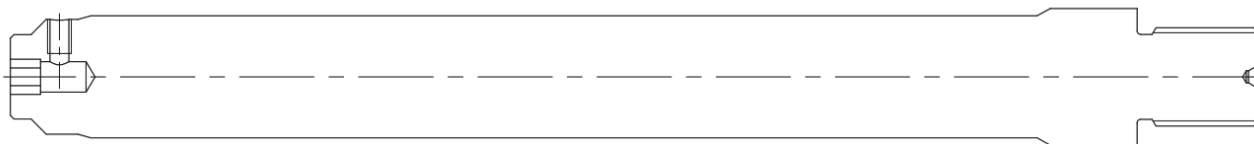
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0828-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023078	HY220722-1	31HRC				

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0817-001
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023002	HY220814-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ1.6 FBH Block Φ3.2 FBH Block Φ6.4 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023017	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0816-002	
Part No.:	X-182586-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023022	RC-08-22	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0818-001	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023062	HY220722-1	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023078	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0905-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023002	HY220814-2	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023017	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023022	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



LIQUID PENETRATE EXAMINATION

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q87
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023113	HC2207019-01	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.08		

LIQUID PENETRATE EXAMINATION

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H87	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023113	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu			Organization:	QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II			Date:	2022.08		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2208-Q88	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geq 1000Uw/cm^2$		
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023101	HC2207019-01	Acceptable						
2	AP023103	HC2207019-01	Acceptable						
Inspection Coverage: Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:	Found to be satisfactory								
Inspected by:	Dongkai Xu			Organization:	QC Department				
Approved by:	Xin Zheng			Date:	2022.08				
NDT Level:	MT II								



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023101	HC2207019-01	Acceptable					
2	AP023103	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



LIQUID PENETRATE EXAMINATION

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HYDROSTATIC TEST REPORT

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安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

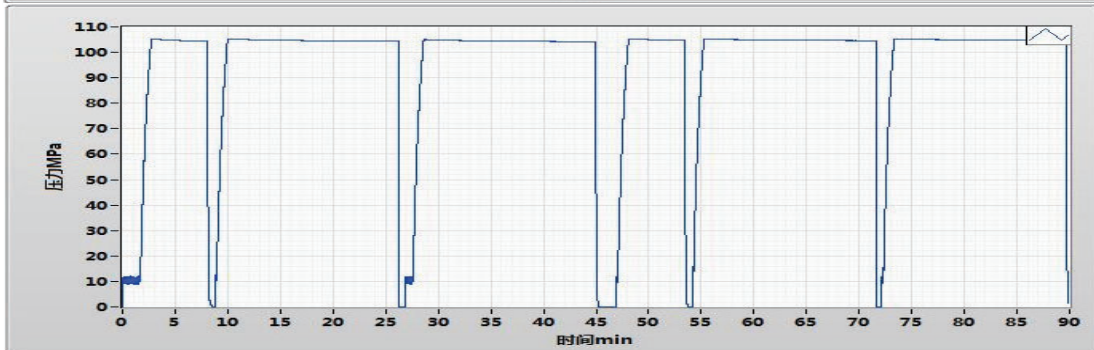
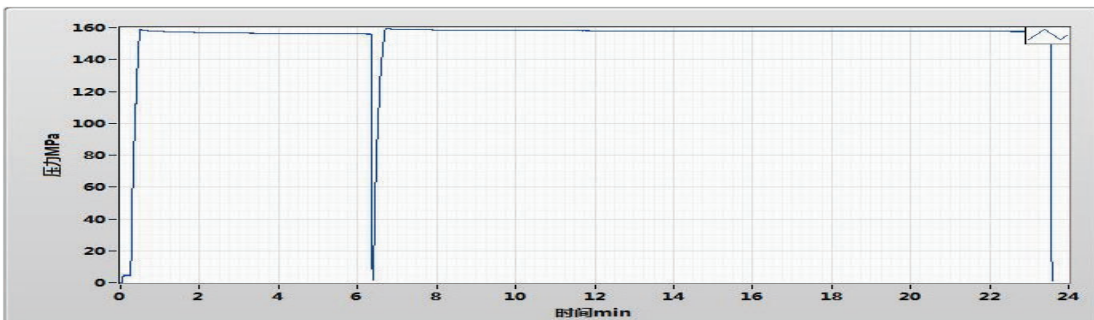
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F001	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.83	155.96	4.0	0.86
2	158.52	157.57	15.0	0.95
3	104.90	104.35	4.0	0.55
4	105.09	104.34	15.0	0.76
5	104.85	104.18	15.0	0.67
6	105.07	104.75	4.0	0.33
7	105.14	104.60	15.0	0.54
8	105.17	104.71	15.0	0.46



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.05



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F002

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F002

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1298	HYDRAULIC GATE VALVE		PFFY105/180-00	AP023F002	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
Heat Treatment																								
P/N	Parts	Description		Material Spec Standards	Melting Practice		Austenized		Quenched		Temper(1)		Temper(2)											
		Melt No.	H.T. No.		Q	Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium						
PFFY105/180-00	BODY	TX21-01970	HY220814-2	AISI 4130 75K,Per ASTM A29	1	AP023004	Forging	880	5.5H	WATER	35	39	665	7.5H	AIR	/	/	/						
	UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023012	Forging	860	7.0H	WATER	27	39	680	8.0H	AIR	/	/	/						
	LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023025	Forging	860	6.5H	WATER	30	42	690	8.83H	AIR	/	/	/						
	STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023068	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H	AIR						
	BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023076	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H	AIR						
	GATE	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	1	AP023111	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	AIR						
	BODY BUSHING	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023106	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	AIR						
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	HY220814-2	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	718	544	22.0	65.3	60/43/45	222HB	JBW-3008/ WDW-300
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	691	586	33.0	46.0	58/51/47	220HB	JBW-3008/ WDW-300
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	684	559	35.0	39.0	53/47/46	220HB	JBW-3008/ WDW-300
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/	/	ø 80x200	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/	/	ø 80x200	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	100x100x200	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	100x100x200	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng -----
NAME of QA Manager, for and on the authority of COMPANY NAME



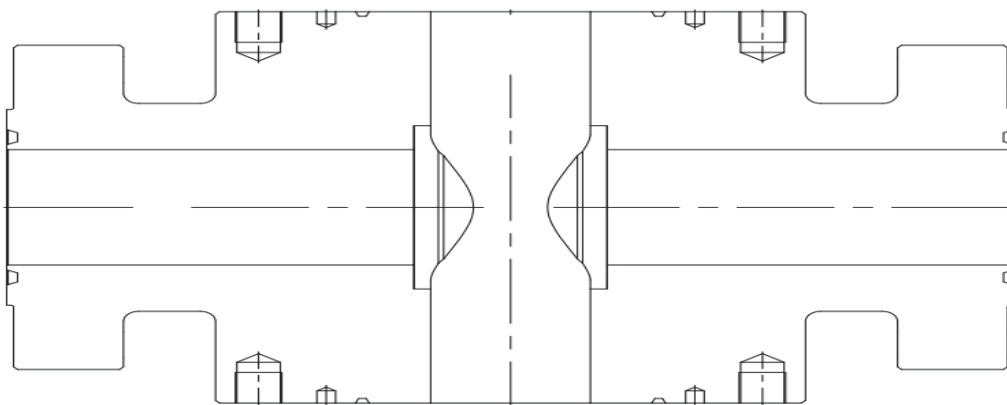
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0905-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023004	HY220814-2	228HB/230HB 229HB/220HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



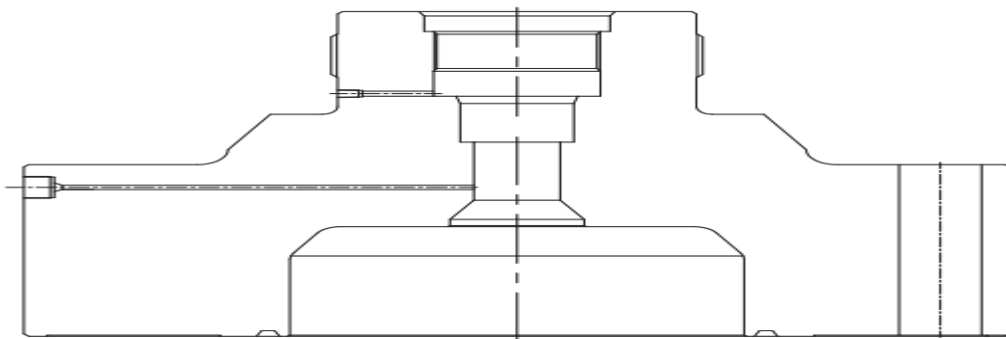
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0902-001
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023012	RC-08-30	229HB/228HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



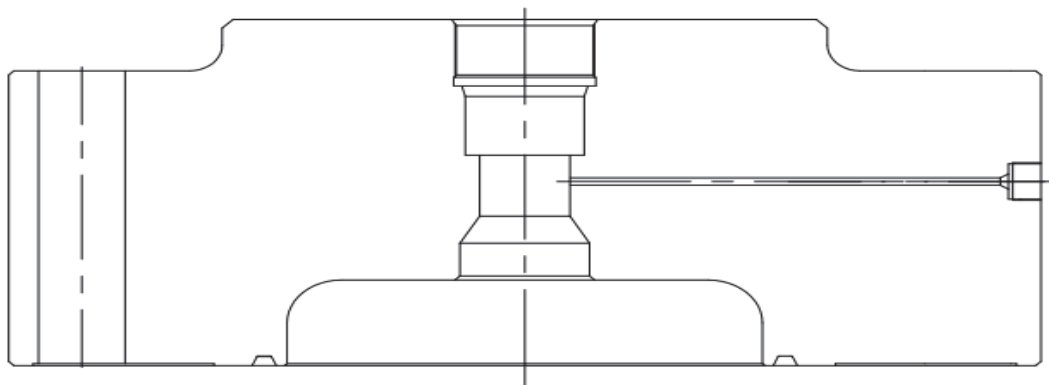
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0831-006
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023025	RC-08-22	200HB/200HB				

Sketch:



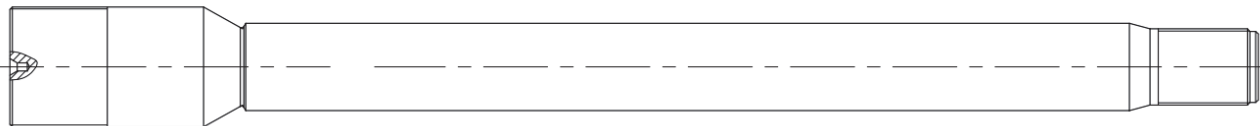
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section with a central hole, a keyway, and a flange. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).	Diameter of steel ball: 10mm	
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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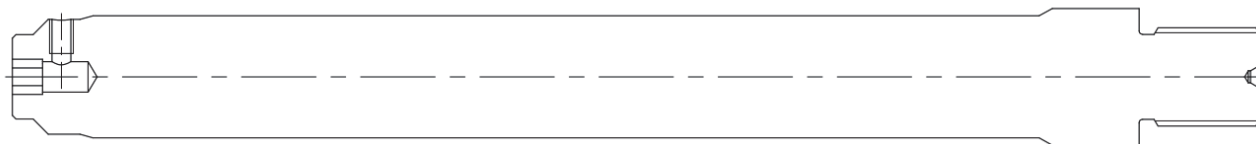
HARDNESS TEST REPORT

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HARDNESS TEST REPORT

Sketch:

12



ULTRASONIC EXAMINATION REPORT

ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023012	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0816-002	
Part No.:	X-182586-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023025	RC-08-22	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0818-001	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023068	HY220722-1	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023076	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0905-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023004	HY220814-2	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023012	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023025	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



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[illegible]

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.09



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q87	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023111	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.08			



LIQUID PENETRATE EXAMINATION

23



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2208-Q88	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$		
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023097	HC2207019-01	Acceptable						
2	AP023106	HC2207019-01	Acceptable						
Inspection Coverage: Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023097	HC2207019-01	Acceptable					
2	AP023106	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		

LIQUID PENETRATE EXAMINATION

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	PTP-0827-001	
Part No.:	X-182591-01	Material:	PH17-4-105K			Coating:	/	
Description:	7-1/16"15000psi Balance Stem					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:	10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023076	HY220722-1	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:		1298		Date:		September, 2022					
Drawing #:		PFFY105/180-00		Specification:		API6A-21st		API Monogram:		6A-2074		Report #:		AP023F002	
Part No.:		X-182734-01		Material:		AISI 4130 75K						Coating:		/	
Description:		7-1/16"15000psi								Quantity:		1			
Item		Pressure		Method				Qty		Result					
Shell		22500psi		API 6A 21st				1		OK					
Seat		15000psi		API 6A 21st				1		OK					
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result							
			A	B				A	B						
1	AP023004	HY220814-2	OK	OK											
Inspection Coverage:															
Per Specification & Requirements: API 6A 21st															
					Approved By:			Examined By:							
Judgments:		[V] Conforms			Xin Zheng			Yifei Ma							
		[] Does Not Conform													



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

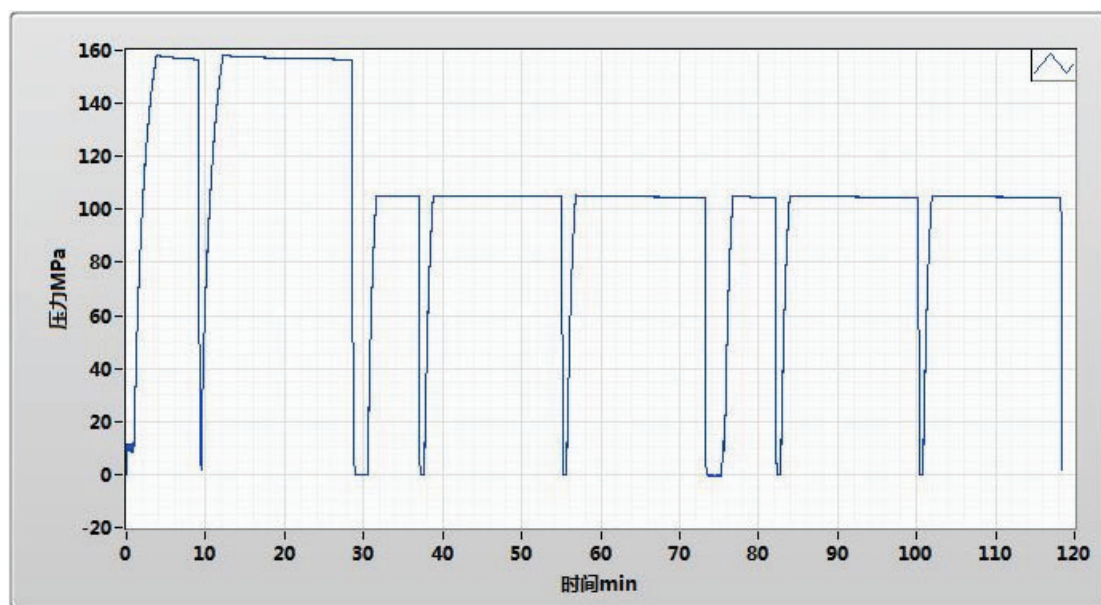
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F002	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.52	156.59	4.0	0.93
2	157.81	156.56	15.0	1.25
3	104.96	104.85	4.0	0.11
4	105.19	104.85	15.0	0.34
5	105.13	104.63	15.0	0.50
6	104.83	104.47	4.0	0.35
7	105.11	104.54	15.0	0.57
8	105.10	104.58	15.0	0.52



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.06



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F003

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F003

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1298	HYDRAULIC GATE VALVE		PFFY105/180-00	AP023F003	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
		Description			Melting Practice			Heat Treatment																
P/N	Parts	Melt No.	H.T. No.	Material Spec Standards	Q t y	Austenitized		Quenched		Temper(1)		Temper(2)												
						Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)							
PFFY105/180-00	BODY	TX21-01970	HY220814-2	AISI 4130 75K,Per ASTM A29	1	AP023003	Forging	880	5.5H	WATER	35	39	665	7.5H	AIR	/	/							
	UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023019	Forging	860	7.0H	WATER	27	39	680	8.0H	AIR	/	/							
	LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023026	Forging	860	6.5H	WATER	30	42	690	8.83H	AIR	/	/							
	STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023067	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023073	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	GATE	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	1	AP023116	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
	BODY BUSHING	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023095 AP023105	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Physical Properties			Impact (46°C)					
																	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	HY220814-2	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	718	544	22.0	65.3	60/43/45	222HB	JBW-3008/ WDW-300
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	691	586	33.0	46.0	58/51/47	220HB	JBW-3008/ WDW-300
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	684	559	35.0	39.0	53/47/46	220HB	JBW-3008/ WDW-300
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/	/	/	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/	/	/	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	/	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	/	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



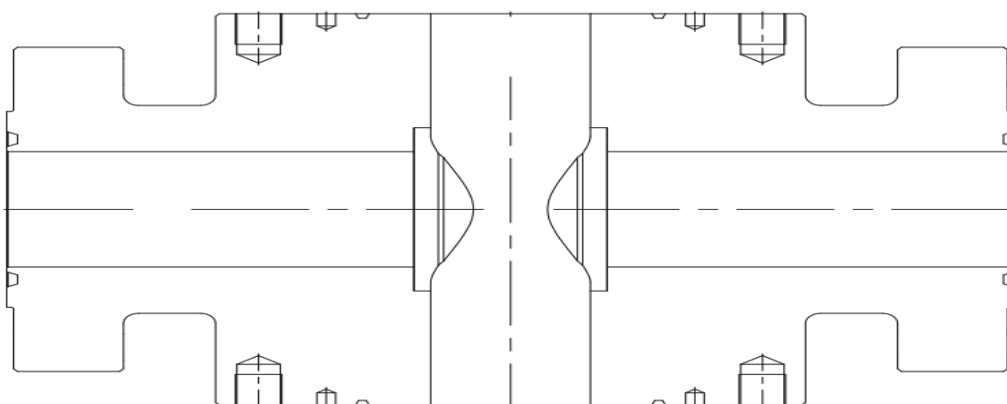
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0905-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023003	HY220814-2	229HB/229HB 229HB/229HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing showing a cross-section of a mechanical assembly. A central shaft is shown with a pulley or wheel mounted on top. A cable or rope is shown running horizontally across the middle of the assembly, supported by a bracket or pulley system. The drawing includes various dimensions and labels, such as '100', '150', '200', '250', '300', '350', '400', '450', '500', '550', '600', '650', '700', '750', '800', '850', '900', '950', '1000', '1050', '1100', '1150', '1200', '1250', '1300', '1350', '1400', '1450', '1500', '1550', '1600', '1650', '1700', '1750', '1800', '1850', '1900', '1950', '2000', '2050', '2100', '2150', '2200', '2250', '2300', '2350', '2400', '2450', '2500', '2550', '2600', '2650', '2700', '2750', '2800', '2850', '2900', '2950', '3000', '3050', '3100', '3150', '3200', '3250', '3300', '3350', '3400', '3450', '3500', '3550', '3600', '3650', '3700', '3750', '3800', '3850', '3900', '3950', '4000', '4050', '4100', '4150', '4200', '4250', '4300', '4350', '4400', '4450', '4500', '4550', '4600', '4650', '4700', '4750', '4800', '4850', '4900', '4950', '5000', '5050', '5100', '5150', '5200', '5250', '5300', '5350', '5400', '5450', '5500', '5550', '5600', '5650', '5700', '5750', '5800', '5850', '5900', '5950', '6000', 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Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



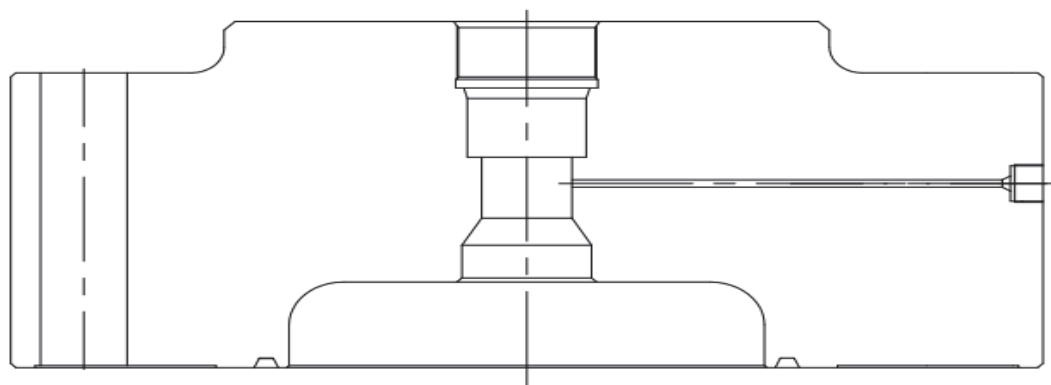
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0831-006
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023026	RC-08-22	200HB/200HB				

Sketch:



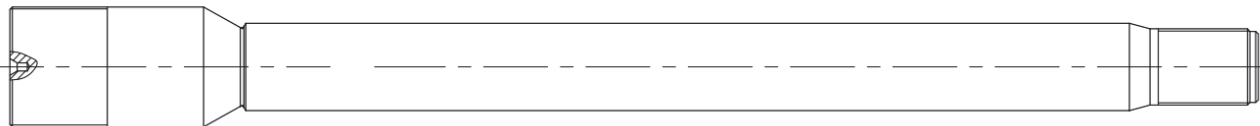
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



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[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



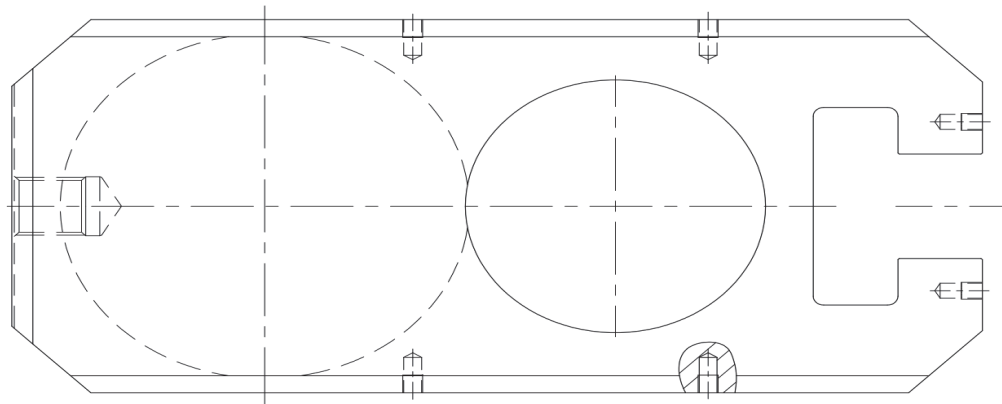
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220822-02
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023116	HC2207019-01	232HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 5Kg-f(49.03N).	Diameter of steel ball: 10mm	
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:			Date:		
							2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220822-05	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body bushing					Quantity:	2	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP023095	HC2207019-01	1171HV					
2	AP023105	HC2207019-01	1197HV					
Sketch:								
Method Used:		Impact Energy: 5Kg-f(49.03N).		Diameter of steel ball: 10mm				
Acceptable Hardness:		≥1050HV		Approved By:			Examined By:	
Judgments:		[V] Conforms		Xin zheng			Zhengguo Yao	
		[] Does Not Conform						



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a shaft with a keyway and a pulley hub. The drawing shows a shaft with a keyway and a pulley hub. The shaft has a diameter of 10 mm and a length of 100 mm. The pulley hub has a diameter of 100 mm and a length of 20 mm. The shaft is shown with a dashed centerline. The pulley hub is shown with a solid line. The drawing is a technical drawing of a shaft and pulley assembly.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		





安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023019	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0816-002	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023026	RC-08-22	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0818-001	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023067	HY220722-1	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023073	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-0905-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP023003	HY220814-2	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023019	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023026	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



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[illegible]

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.09



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q87
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023116	HC2207019-01	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.08		



LIQUID PENETRATE EXAMINATION

23



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023095	HC2207019-01	Acceptable					
2	AP023105	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-0827-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023073	HY220722-1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:	QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:	2022.08			



HYDROSTATIC TEST REPORT

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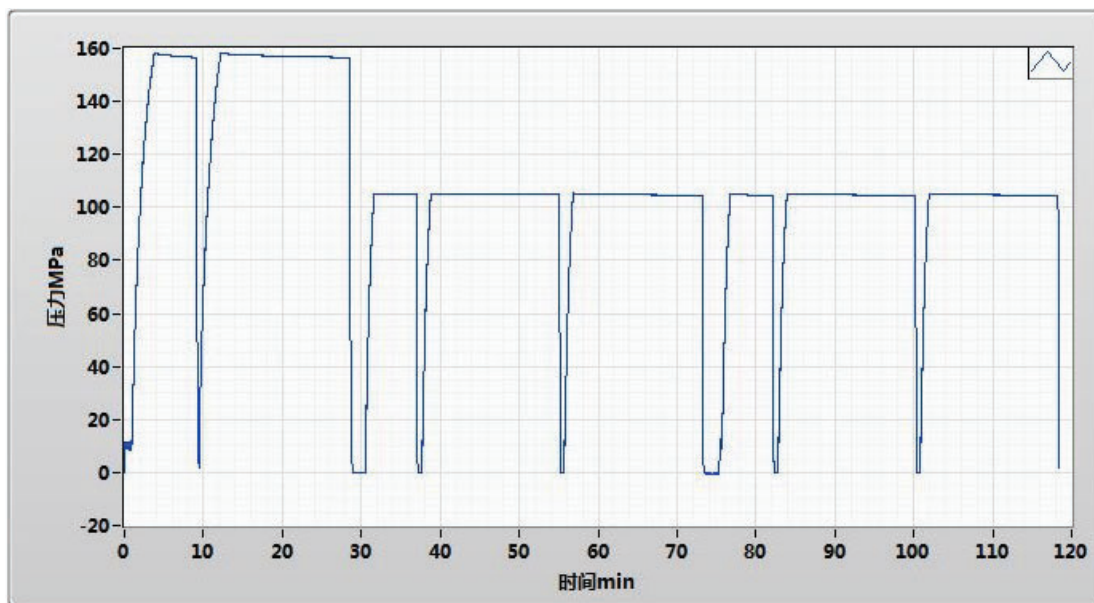
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F003	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.52	156.59	4.0	0.93
2	157.81	156.56	15.0	1.25
3	104.96	104.85	4.0	0.11
4	105.19	104.85	15.0	0.34
5	105.13	104.63	15.0	0.50
6	104.83	104.47	4.0	0.35
7	105.11	104.54	15.0	0.57
8	105.10	104.58	15.0	0.52



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.06



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F004

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F004

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1298	HYDRAULIC GATE VALVE		PFFY105/180-00	AP023F004	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
Heat Treatment																								
P/N	Parts	Description		Material Spec Standards	Melting Practice		Austenitized		Quenched		Temper(1)		Temper(2)											
		Melt No.	H.T. No.		Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Temp (°C)	Time (min)									
PFFY105/180-00	BODY	TX21-01970	HY220820-3	AISI 4130 75K,Per ASTM A29	1	AP023006	Forging	870	5.5H	WATER	37	40	670	7.6H	AIR	/	/							
	UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023020	Forging	860	7.0H	WATER	27	39	680	8.0H	AIR	/	/							
	LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023027	Forging	860	6.5H	WATER	30	42	690	8.83H	AIR	/	/							
	STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023061	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023072	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	GATE	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	1	AP023117	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
	BODY BUSHING	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023083	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	HY220820-3	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	718	544	22.0	65.3	60/43/45	222HB	JBW-300B/WDW-300
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	691	586	33.0	46.0	58/51/47	220HB	JBW-300B/WDW-300
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	684	559	35.0	39.0	53/47/46	220HB	JBW-300B/WDW-300
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/	/	ø 80x200	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-300B/WDW-300
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/	/	ø 80x200	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-300B/WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	100x100x200	QTC	690	570	23.0	65.0	/	224HB	JBW-300B/WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	100x100x200	QTC	690	570	23.0	65.0	/	224HB	JBW-300B/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



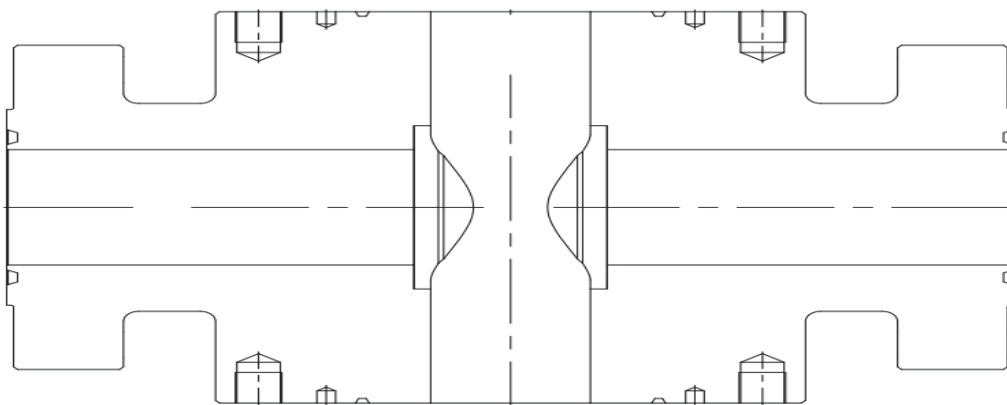
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0905-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023006	HY220820-3	217HB/212HB 217HB/210HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



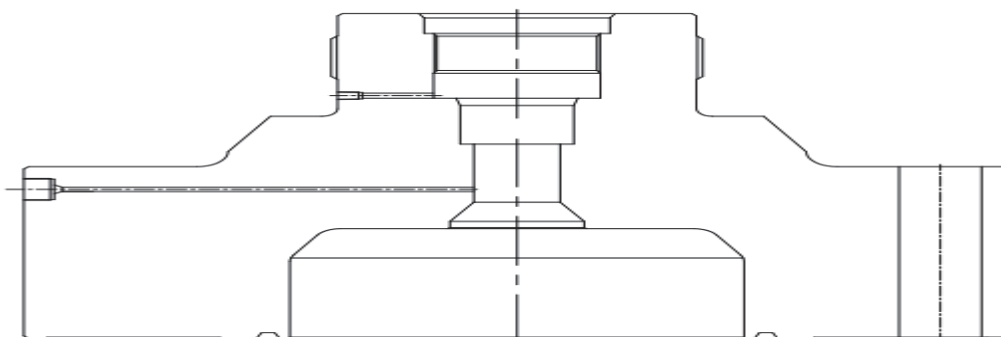
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0902-001
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023020	RC-08-30	228HB/229HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

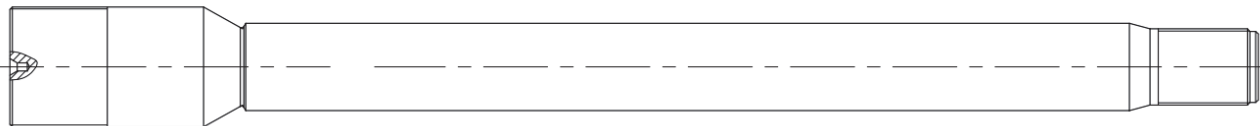
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).	Diameter of steel ball: 10mm	
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	/		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023108	HC2207019-01	96HRB				
2	AP023093	HC2207019-01	96HRB				
Sketch:							
Method Used:							
Acceptable Hardness:	94HRB-99HRB		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



HARDNESS TEST REPORT

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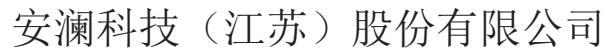


ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a shaft with a keyway and a pulley hub. The drawing shows a cross-section of the shaft with a keyway. The pulley hub is shown on the right side of the shaft. The drawing includes a section line (dashed line) indicating the cut. The dimensions are given in millimeters (mm).

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0823-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023006	HY220820-3	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE			Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block			Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st			Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB			Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023020	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0816-002
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023027	RC-08-22	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0818-001	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023061	HY220722-1	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023072	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0905-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023006	HY220820-3	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023020	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023027	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



LIQUID PENETRATE EXAMINATION

21



MAGNETIC PARTICLE INSPECTION REPORT

22



LIQUID PENETRATE EXAMINATION

23



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2208-Q88	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:			3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:			≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023108	HC2207019-01	Acceptable						
2	AP023093	HC2207019-01	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023108	HC2207019-01	Acceptable					
2	AP023093	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-0827-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023072	HY220722-1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.08		



HYDROSTATIC TEST REPORT

27



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

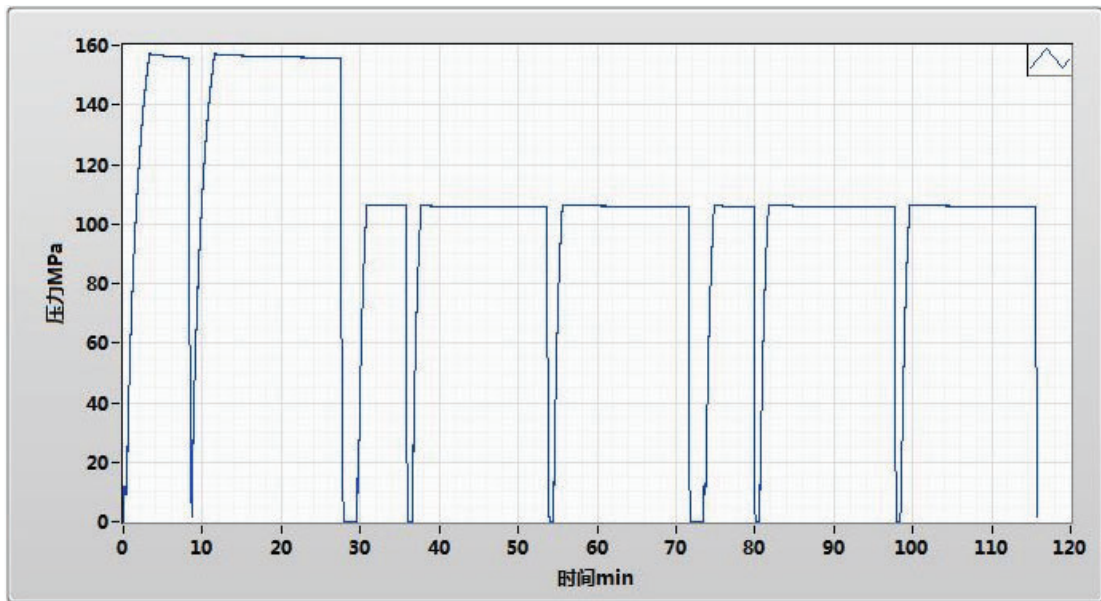
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F004	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.71	155.85	4.0	0.85
2	156.88	155.78	15.0	1.11
3	106.20	106.06	4.0	0.14
4	106.06	105.71	15.0	0.35
5	106.22	105.89	15.0	0.33
6	106.06	105.70	4.0	0.36
7	106.20	105.66	15.0	0.54
8	106.21	105.83	15.0	0.38



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.07



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F005

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F005

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications					
		1298	HYDRAULIC GATE VALVE		PFFY105/180-00	AP023F005	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st					
P/N	Parts	Description		Melting Practice			Heat Treatment			Temper(1)		Temper(2)						
		Melt No.	H.T. No.	Material Spec Standards	Q t y	Serial No.	Finished	Austenized Temp (°C)	Time (min)	Quenched Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Temp (°C)			
		TX21-01970	HY220814-2	AISI 4130 75K,Per ASTM A29	1	AP023001	Forging	880	5.5H	WATER	35	39	665	7.5H	AIR	/	/	
		UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023018	Forging	860	7.0H	WATER	27	39	680	8.0H	AIR	/	/
		LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023028	Forging	860	6.5H	WATER	30	42	690	8.83H	AIR	/	/
		STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023066	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H
		BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023077	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H
GATE		122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	1	AP023115	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	
BODY BUSHING		122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023098	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	
Chemical Analysis (wt. %)																		
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origin	
TX21-01970	HY220814-2	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/	/	ø 80x200	QTC	
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/	/	ø 80x200	QTC	
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	100x100x200	QTC	
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	100x100x200	QTC	
Physical Properties																		
									Yield (MPa)			Tensile (MPa)			Elongatio n (%)			
									ROA (%)			Impact(46°C) Impact direction (Transverse)			Hardness			
									65.3			60/43/45			222HB			
									46.0			58/51/47			220HB			
									39.0			53/47/46			220HB			
									61.6			84/60/52			32HRC			
									61.6			84/60/52			32HRC			
									65.0			/			224HB			
									65.0			/			224HB			

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



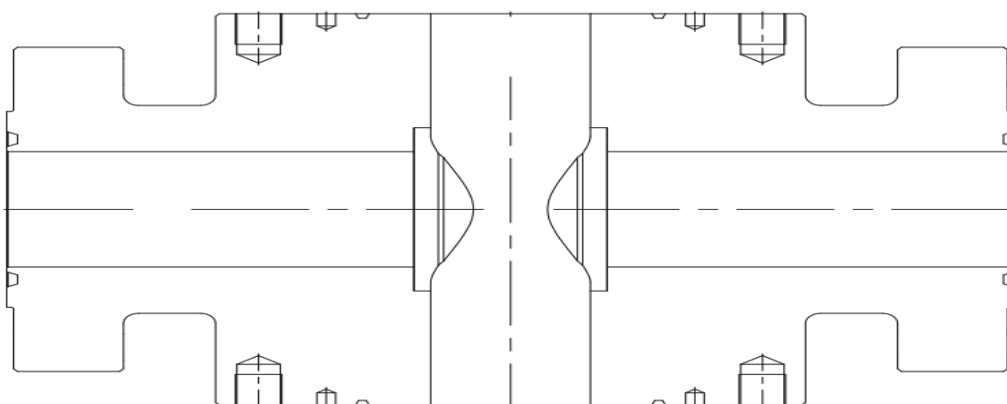
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0905-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023001	HY220814-2	229HB/229HB 229HB/228HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing showing a cross-section of a mechanical assembly. A central shaft is shown with a pulley or wheel mounted on top. A cable or rope is shown running horizontally across the middle of the assembly, supported by a bracket or pulley system. The drawing includes various dimensions and labels, such as '100', '150', '200', '250', '300', '350', '400', '450', '500', '550', '600', '650', '700', '750', '800', '850', '900', '950', '1000', '1050', '1100', '1150', '1200', '1250', '1300', '1350', '1400', '1450', '1500', '1550', '1600', '1650', '1700', '1750', '1800', '1850', '1900', '1950', '2000', '2050', '2100', '2150', '2200', '2250', '2300', '2350', '2400', '2450', '2500', '2550', '2600', '2650', '2700', '2750', '2800', '2850', '2900', '2950', '3000', '3050', '3100', '3150', '3200', '3250', '3300', '3350', '3400', '3450', '3500', '3550', '3600', '3650', '3700', '3750', '3800', '3850', '3900', '3950', '4000', '4050', '4100', '4150', '4200', '4250', '4300', '4350', '4400', '4450', '4500', '4550', '4600', '4650', '4700', '4750', '4800', '4850', '4900', '4950', '5000', '5050', '5100', '5150', '5200', '5250', '5300', '5350', '5400', '5450', '5500', '5550', '5600', '5650', '5700', '5750', '5800', '5850', '5900', '5950', '6000', 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Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

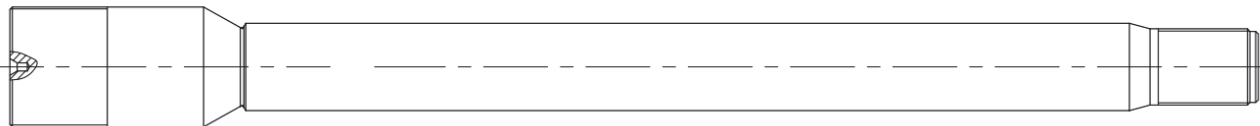
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a rectangular building plan. The plan features two large circular rooms, one on the left (dashed outline) and one on the right (solid outline). A central corridor runs horizontally between them. To the left of the dashed circle is a small rectangular room with a door. To the right of the solid circle is a staircase. The plan also includes several windows and doors, and a small circular feature at the bottom right.

Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



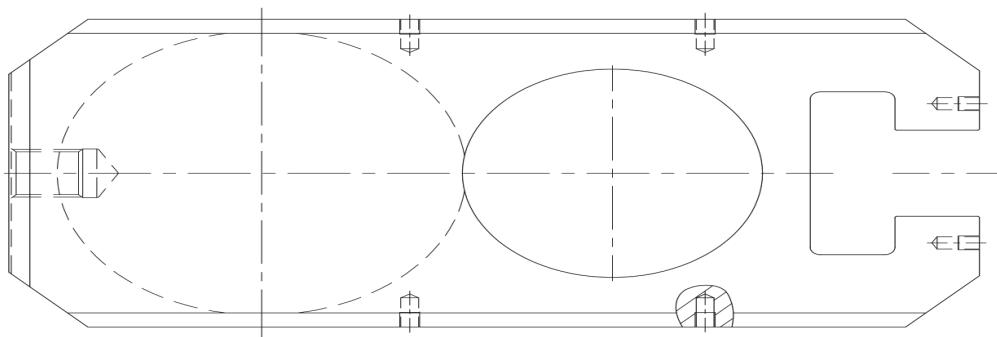
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:		
							2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220822-04	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP023115	HC2207019-01	1171HV					

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N). Diameter of steel ball: 10mm		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0817-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023001	HY220814-2	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE			Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block			Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st			Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB			Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023018	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0816-002	
Part No.:	X-182586-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023028	RC-08-22	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



ULTRASONIC EXAMINATION REPORT

ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023077	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0905-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023001	HY220814-2	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023018	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023028	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



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[illegible]

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.09



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2208-Q87	
Part No.:	X-182589-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Gate						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023115	HC2207019-01	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.08		



LIQUID PENETRATE EXAMINATION

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MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023098	HC2207019-01	Acceptable					
2	AP023096	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-0827-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023077	HY220722-1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:	QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:	2022.08			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

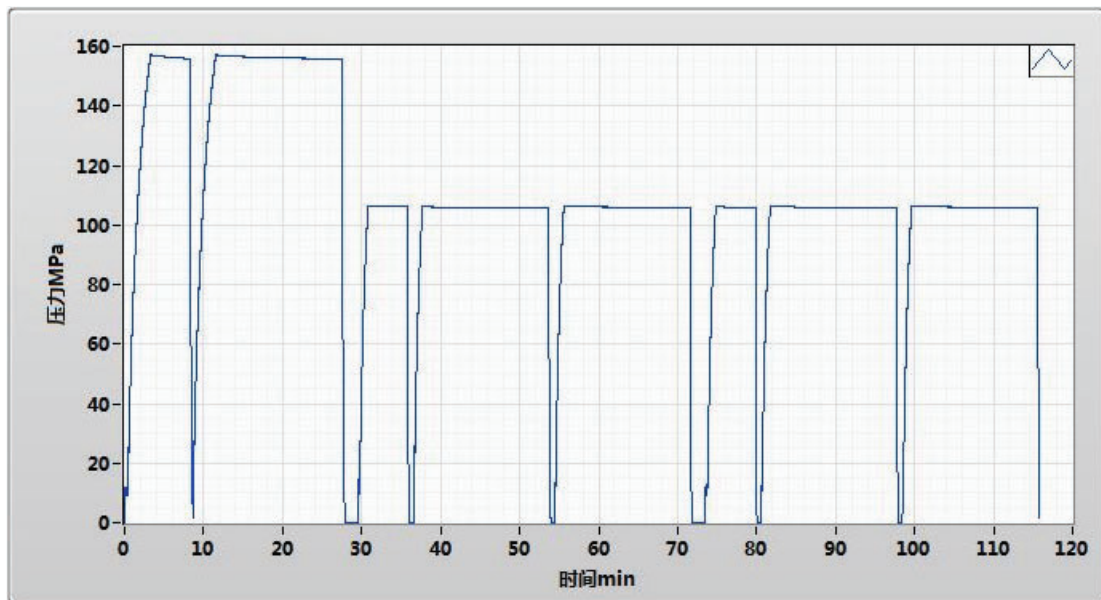
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F005	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.71	155.85	4.0	0.85
2	156.88	155.78	15.0	1.11
3	106.20	106.06	4.0	0.14
4	106.06	105.71	15.0	0.35
5	106.22	105.89	15.0	0.33
6	106.06	105.70	4.0	0.36
7	106.20	105.66	15.0	0.54
8	106.21	105.83	15.0	0.38



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.07



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F006

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F006

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



Date: September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng
NAME of QA Manager, for and on the authority of COMPANY NAME



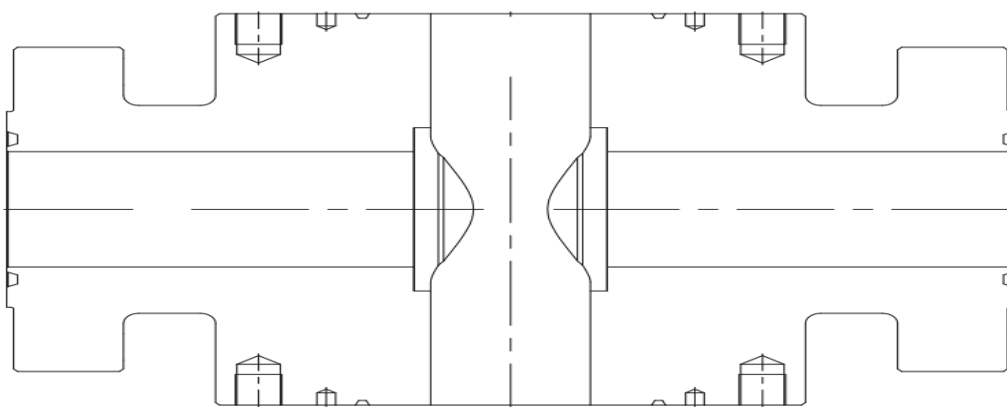
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0905-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023008	RC-08-62	218HB/216HB 222HB/216HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing showing a cross-section of a mechanical assembly. A central shaft is shown with a pulley or wheel mounted on it. A cable or rope is shown passing over the pulley, with one end extending to the left and the other end extending to the right. The drawing includes a vertical centerline and a horizontal line indicating the shaft's axis.

Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

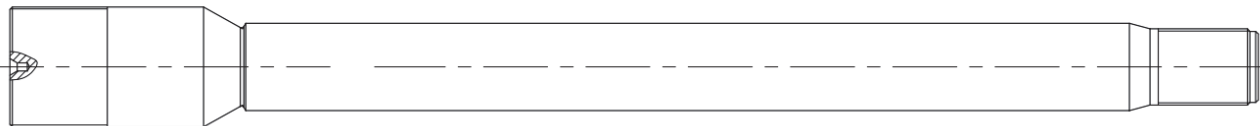
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or housing, showing a cross-section with a central hole, a keyway, and a threaded section. The drawing includes a top view and a side view, with dimensions and a scale of 1:1.

Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section with a central hole, a dashed circle indicating a hidden feature, and various dimensions and tolerances.

Method Used:	Impact Energy: 5Kg-f(49.03N).	Diameter of steel ball: 10mm	
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:			Date:		
							2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220822-05	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body bushing					Quantity:	2	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP023100	HC2207019-01	1197HV					
2	AP023099	HC2207019-01	1171HV					
Sketch:								
Method Used:		Impact Energy: 5Kg-f(49.03N).		Diameter of steel ball: 10mm				
Acceptable Hardness:		≥1050HV		Approved By:			Examined By:	
Judgments:		[V] Conforms		Xin zheng			Zhengguo Yao	
		[] Does Not Conform						



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a shaft with a keyway and a pulley hub. The drawing shows a side view of the shaft with a keyway. A dashed line indicates the center of the shaft. The pulley hub is shown on the right side of the shaft. The drawing includes dimensions and a section line.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0902-001
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023008	RC-08-62	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ1.6 FBH Block Φ3.2 FBH Block Φ6.4 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14×Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023016	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0816-002
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023024	RC-08-22	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0818-001
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023070	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023075	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023016	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023024	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		

LIQUID PENETRATE EXAMINATION

[illegible]

Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.09



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q87	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023112	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.08			



LIQUID PENETRATE EXAMINATION

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MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2208-Q88
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:		3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023100	HC2207019-01	Acceptable					
2	AP023099	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu			Organization:	QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II			Date:	2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023100	HC2207019-01	Acceptable					
2	AP023099	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



LIQUID PENETRATE EXAMINATION

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:		1298		Date:		September, 2022	
Drawing #:		PFFY105/180-00	Specification:	API6A-21st		API Monogram:	6A-2074	Report #:		AP023F006
Part No.:		X-182734-01	Material:	AISI 4130 75K				Coating:		/
Description:		7-1/16"15000psi						Quantity:		1
Item		Pressure	Method			Qty		Result		
Shell		22500psi	API 6A 21st			1		OK		
Seat		15000psi	API 6A 21st			1		OK		
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result		
			A	B				A	B	
1	AP023008	RC-08-62	OK	OK						
Inspection Coverage:										
Per Specification & Requirements: API 6A 21st										
					Approved By:			Examined By:		
Judgments:		[V] Conforms			Xin Zheng			Yifei Ma		
		[] Does Not Conform								



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

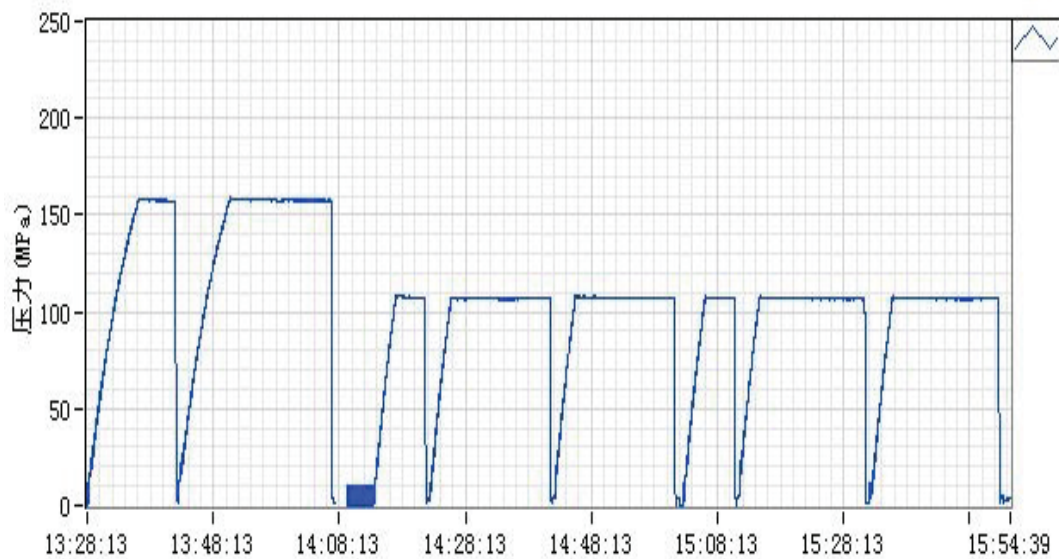
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F006	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	1#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	158.0	157.4	4.0	0.5
2	158.3	157.4	15.0	0.9
3	107.9	107.4	4.0	0.5
4	107.4	106.8	15.0	0.6
5	107.7	107.4	15.0	0.3
6	107.3	106.9	4.0	0.4
7	107.3	106.8	15.0	0.5
8	107.3	106.9	15.0	0.5



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.13



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F007

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F007

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1298	HYDRAULIC GATE VALVE		PFFY105/180-00	AP023F007	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
		Description			Melting Practice			Heat Treatment																
P/N	Parts	Melt No.	H.T. No.	Material Spec Standards	Q t y	Austenitized		Quenched		Temper(1)		Temper(2)												
						Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)							
PFFY105/180-00	BODY	TX21-01970	RC-08-62	AISI 4130 75K,Per ASTM A29	1	AP023007	Forging	860	6.5H	WATER	27	42	680	10.0H	AIR	/	/							
	UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023014	Forging	860	7.0H	WATER	27	39	680	8.0H	AIR	/	/							
	LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023030	Forging	860	6.5H	WATER	30	42	690	8.83H	AIR	/	/							
	STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023063	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023079	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	GATE	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	1	AP023120	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
	BODY BUSHING	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023104	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Physical Properties				Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type		
																Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)				ROA (%)	
TX21-01970	RC-08-62	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	672	570	38.0	48.0	53/56/48	222HB	JBW-3008/ WDW-300
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	691	586	33.0	46.0	58/51/47	220HB	JBW-3008/ WDW-300
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	684	559	35.0	39.0	53/47/46	220HB	JBW-3008/ WDW-300
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/	/	/	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/	/	/	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	/	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	/	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



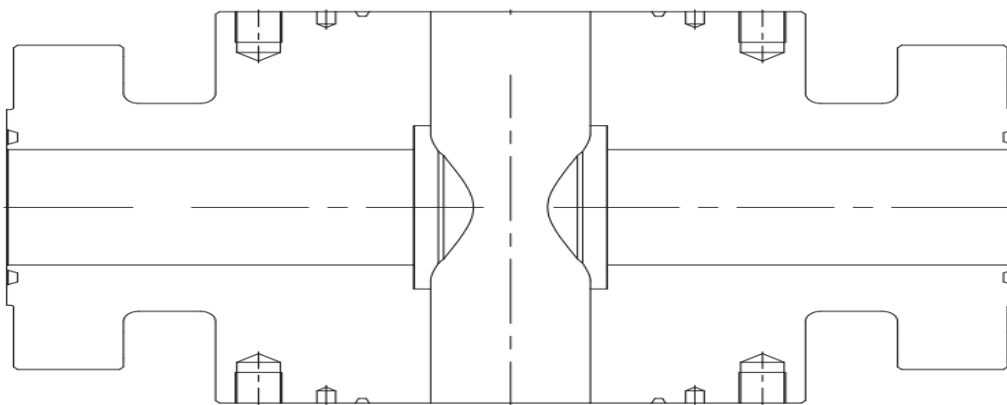
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0905-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023007	RC-08-62	199HB/204HB 205HB/199HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



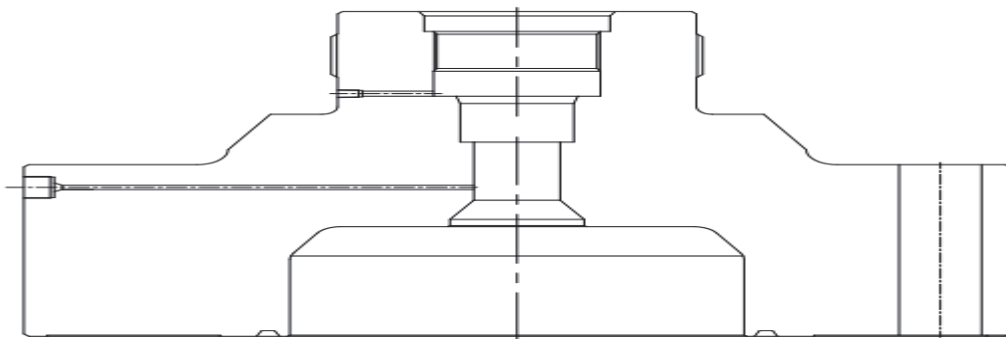
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0902-001
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023014	RC-08-30	226HB/228HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

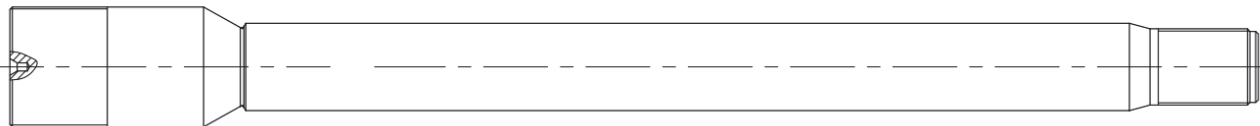
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



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[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



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[illegible]

Technical drawing of a mechanical part, likely a piston or cylinder head, showing a cross-section with a central bore and a side port. The drawing includes a top view (left) and a side view (right), with dimensions and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



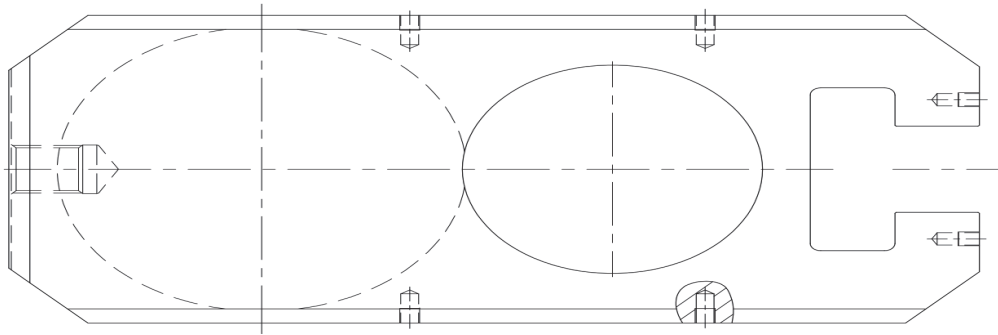
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220822-04
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023120	HC2207019-01	1171HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N). Diameter of steel ball: 10mm		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

10



HARDNESS TEST REPORT

11



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a shaft with a keyway and a pulley hub. The drawing shows a cross-section of the shaft with a keyway. The keyway is defined by a dashed line indicating its depth. The pulley hub is shown on the right side of the shaft. The drawing includes a section line (A-A) and a dimension line indicating the length of the shaft.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0902-001
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023007	RC-08-62	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ1.6 FBH Block Φ3.2 FBH Block Φ6.4 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14×Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023014	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0816-002
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023030	RC-08-22	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0818-001	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023063	HY220722-1	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023079	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023014	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023030	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		

LIQUID PENETRATE EXAMINATION

[illegible]

Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.09



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q87
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023120	HC2207019-01	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.08		



LIQUID PENETRATE EXAMINATION

23



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		≥1000Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023104	HC2207019-01	Acceptable					
2	AP023107	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.08			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023104	HC2207019-01	Acceptable					
2	AP023107	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



LIQUID PENETRATE EXAMINATION

Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.



HYDROSTATIC TEST REPORT

27



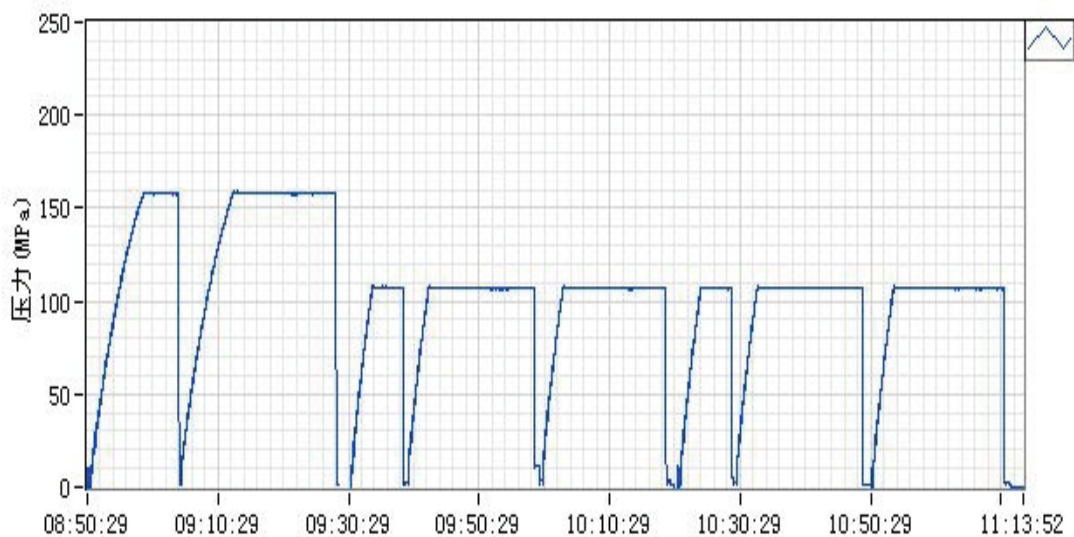
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F007	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	1#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.6	157.8	4.0	-0.2
2	158.5	157.6	15.0	0.9
3	106.9	107.4	4.0	-0.5
4	107.5	107.1	15.0	0.4
5	107.4	107.1	15.0	0.3
6	107.2	106.9	4.0	0.3
7	107.6	107.0	15.0	0.5
8	107.3	106.6	15.0	0.6



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.13



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F008

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F008

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1298	HYDRAULIC GATE VALVE		PFFY105/180-00	AP023F008	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
		Description			Melting Practice			Quenched			Heat Treatment													
P/N	Parts	Melt No.	H. T. No.	Material Spec Standards	Q t y	Austenized		Medium	Temper(1)		Medium	Temp (°C)	Temper(2)											
						Serial No.	Finished		Time (min)	Start Temp			Time (min)	Temp (°C)	Time (min)	Temp (°C)								
PFFY105/180-00	BODY	TX21-01970	RC-08-62	AISI 4130 75K,Per ASTM A29	1	AP023010	Forging	860	6.5H	WATER	27	42	680	10.0H	AIR	/	/							
	UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023015	Forging	860	7.0H	WATER	27	39	680	8.0H	AIR	/	/							
	LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023029	Forging	860	6.5H	WATER	30	42	690	8.83H	AIR	/	/							
	STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023069	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023074	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H							
	GATE	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	1	AP023118	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
	BODY BUSHING	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023092	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
Chemical Analysis (wt. %)																								
Melt No.	H. T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Physical Properties				Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type		
																Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)				ROA (%)	
TX21-01970	RC-08-62	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	672	570	38.0	48.0	53/56/48	222HB	JBW-3008/ WDW-300
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	691	586	33.0	46.0	58/51/47	220HB	JBW-3008/ WDW-300
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	/	QTC	684	559	35.0	39.0	53/47/46	220HB	JBW-3008/ WDW-300
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/	/	/	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/	/	/	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	/	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	/	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



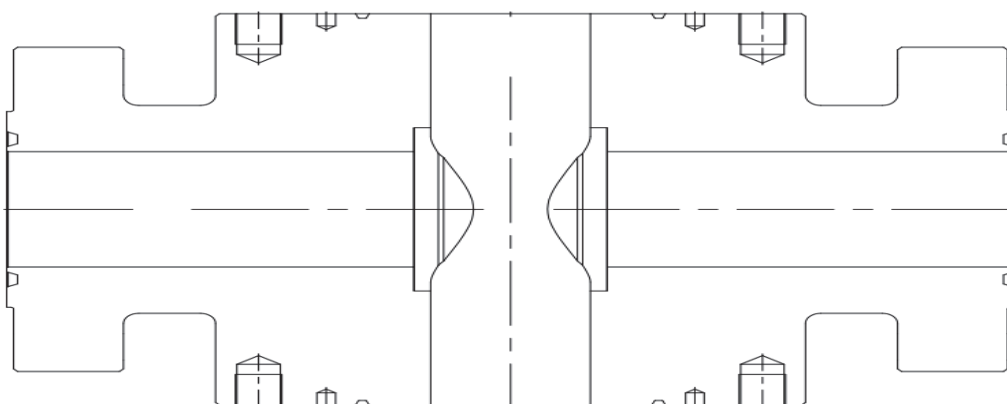
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0905-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023010	RC-08-62	212HB/222HB 218HB/215HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



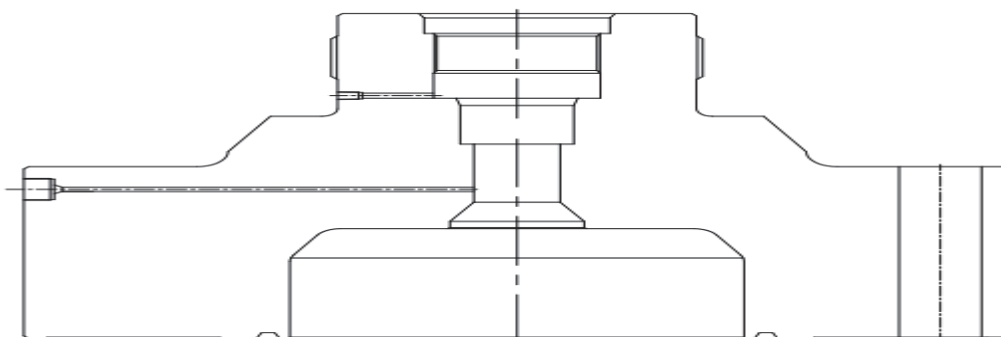
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0902-001
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023015	RC-08-30	227HB/228HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

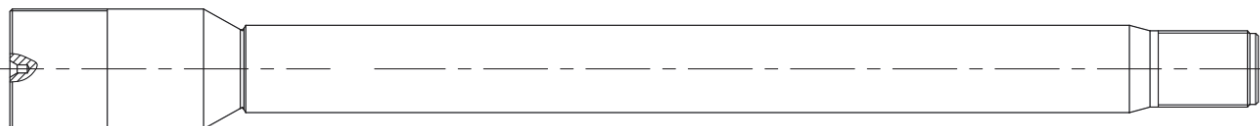
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a piston or cylinder head, showing a cross-section with a central bore and a side port. The drawing includes a top view (left) and a side view (right), with dimensions and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).	Diameter of steel ball: 10mm	
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



HARDNESS TEST REPORT

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HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a shaft with a keyway. The left side shows a cross-section with a central hole and a keyway. The right side shows a side view of the shaft with a keyway. The drawing is a line drawing with no shading.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0902-001
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023010	RC-08-62	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ1.6 FBH Block Φ3.2 FBH Block Φ6.4 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023015	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0816-002	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023029	RC-08-22	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0818-001	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023069	HY220722-1	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023074	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-0908-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP023010	RC-08-62	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm ²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023015	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023029	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



LIQUID PENETRATE EXAMINATION

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MAGNETIC PARTICLE INSPECTION REPORT

22



LIQUID PENETRATE EXAMINATION

23



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2208-Q88	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geq 1000Uw/cm^2$		
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023091	HC2207019-01	Acceptable						
2	AP023092	HC2207019-01	Acceptable						
Inspection Coverage: Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023091	HC2207019-01	Acceptable					
2	AP023092	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



LIQUID PENETRATE EXAMINATION

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:		1298		Date:		September, 2022	
Drawing #:		PFFY105/180-00	Specification:	API6A-21st		API Monogram:	6A-2074	Report #:		AP023F008
Part No.:		X-182734-01	Material:	AISI 4130 75K				Coating:		/
Description:		7-1/16"15000psi						Quantity:		1
Item		Pressure	Method			Qty		Result		
Shell		22500psi	API 6A 21st			1		OK		
Seat		15000psi	API 6A 21st			1		OK		
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result		
			A	B				A	B	
1	AP023010	RC-08-62	OK	OK						
Inspection Coverage:										
Per Specification & Requirements: API 6A 21st										
					Approved By:			Examined By:		
Judgments:		[V] Conforms			Xin Zheng			Yifei Ma		
		[] Does Not Conform								



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

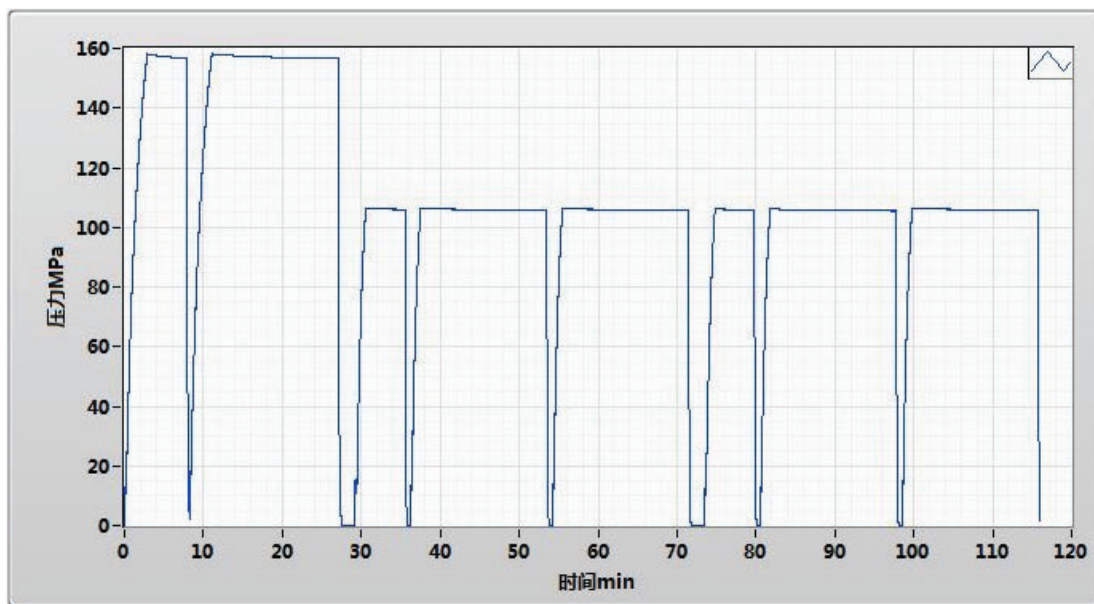
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F008	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.64	156.58	4.0	1.06
2	157.88	156.52	15.0	1.36
3	106.17	105.99	4.0	0.18
4	106.19	105.77	15.0	0.42
5	106.15	105.77	15.0	0.38
6	106.06	105.71	4.0	0.35
7	106.06	105.49	15.0	0.57
8	106.21	105.81	15.0	0.40



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.13



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F009

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F009

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications									
		1298	HYDRAULIC GATE VALVE		PFFY105/180-00	AP023F009	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st									
P/N	Parts	Description		Material Spec Standards	Melting Practice			Heat Treatment			Temper(1)		Temper(2)									
		Melt No.	H.T. No.		Q	Serial No.	Finished	Austenized	Quenched	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium							
		BODY	TX21-01970	HY220820-3	AISI 4130 75K,Per ASTM A29	1	AP023005	Forging	870	5.5H	WATER	37	40	670	7.6H	AIR	/	/				
		UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023011	Forging	860	7.0H	WATER	27	39	680	8.0H	AIR	/	/				
		LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023021	Forging	860	6.5H	WATER	30	42	690	8.83H	AIR	/	/				
		STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023065	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H				
		BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023071	Forging	1030	3.5H	WATER	28	32	635	5.0H	AIR	630	5.2H				
BODY BUSHING	GATE	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	1	AP023114	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H					
		122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023094	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H					
Chemical Analysis (wt. %)																						
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Physical Properties						
		Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) direction (Transverse)	Hardness	Equipment Type													
TX21-01970	HY220820-3	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	718	544	22.0	65.3	60/43/45	222HB	JBW-3008/WDW-300
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	691	586	33.0	46.0	58/51/47	220HB	JBW-3008/WDW-300
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	684	559	35.0	39.0	53/47/46	220HB	JBW-3008/WDW-300
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/	/	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/WDW-300
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/	/	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	690	570	23.0	65.0	/	224HB	JBW-3008/WDW-300
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/	/	690	570	23.0	65.0	/	224HB	JBW-3008/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



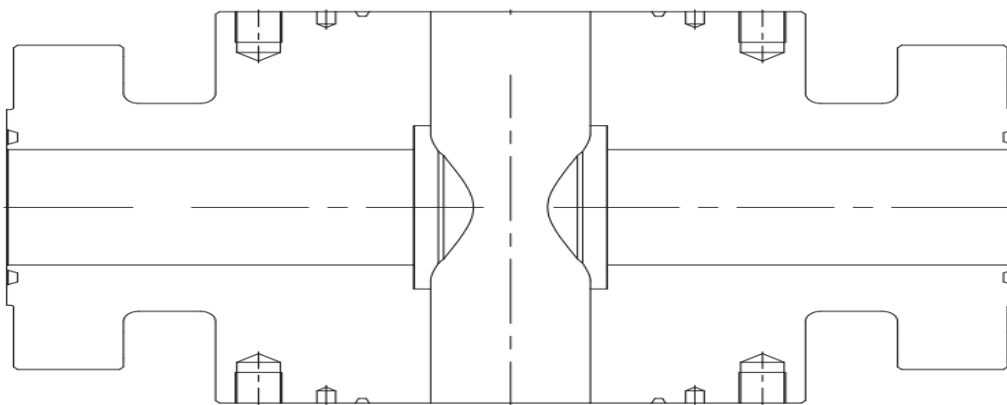
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0914-006
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023005	HY220820-3	201HB/208HB 212HB/213HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



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[illegible]

Technical drawing showing a cross-section of a mechanical assembly. A central shaft is shown with a pulley or wheel mounted on it. A cable or rope is shown passing over the pulley, with one end extending to the left and the other end extending to the right. The drawing includes a vertical centerline and a horizontal line indicating the shaft's axis.

Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



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[illegible]

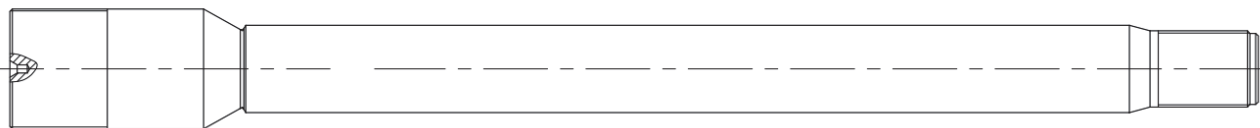
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or housing, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 5Kg-f(49.03N).	Diameter of steel ball: 10mm	
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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HARDNESS TEST REPORT

11



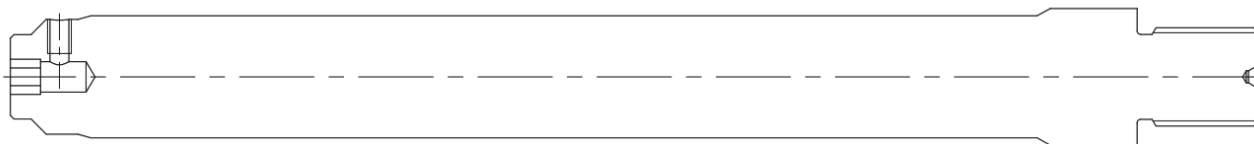
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0828-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023071	HY220722-1	29HRC				

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		





安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023011	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0816-002
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023021	RC-08-22	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0818-001	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023065	HY220722-1	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023071	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0913-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023005	HY220820-3	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023011	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023021	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		

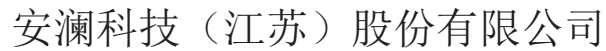


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[illegible]

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.09



MAGNETIC PARTICLE INSPECTION REPORT

22



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H87	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023114	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.08			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		≥1000Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023094	HC2207019-01	Acceptable					
2	AP023102	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.08			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023094	HC2207019-01	Acceptable					
2	AP023102	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-0827-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023071	HY220722-1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

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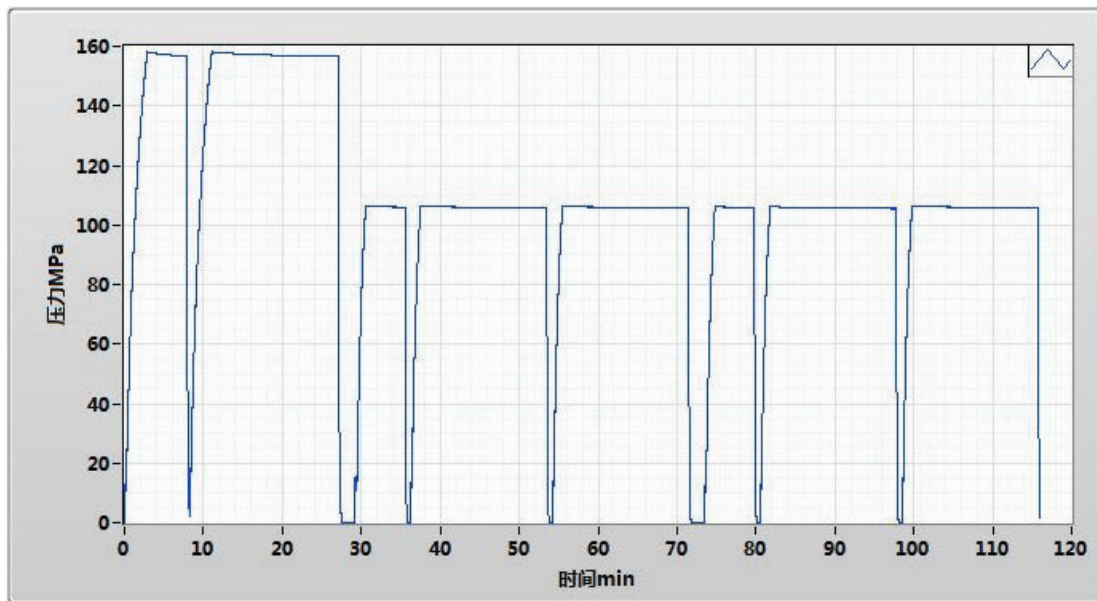
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F009	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.64	156.58	4.0	1.06
2	157.88	156.52	15.0	1.36
3	106.17	105.99	4.0	0.18
4	106.19	105.77	15.0	0.42
5	106.15	105.77	15.0	0.38
6	106.06	105.71	4.0	0.35
7	106.06	105.49	15.0	0.57
8	106.21	105.81	15.0	0.40



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.13



REPORT INDEX

Purchase Order: 1298

Quantity: 1EA

Shipment No.: Crate# AP023F010

Shipment Date: September, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
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安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1298, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1298

SERIAL NO.: AP023F010

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: September, 2022

Customer: _____

P.O. Number: 1298



安澜科技（江苏）股份有限公司

No.: AV00012

Date:September, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No. 1298	Product HYDRAULIC GATE VALVE		P/N	Serial No. AP023F010	Qty 1	Size 7-1/16"	WP (psi) 15000Psi	Material EE-0.5	PSL PSL3	Temp LU	Specifications API Spec 6A 21st	
P/N	Parts	Description		Material Spec Standards	Melting Practice		Austenitized		Quenched		Temper(1)		Temper(2)	
					Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Temp (°C)	Time (min)	Temp (°C)	Time (min)
PFFY105/180-00	BODY	TX21-01970	RC-08-62	AISI 4130 75K,Per ASTM A29	1	AP023009	860	6.5H	WATER	27	42	680	AIR	/
	UPPER BONNET	TX21-01970	RC-08-30	AISI 4130 75K,Per ASTM A29	1	AP023013	860	7.0H	WATER	27	39	680	AIR	/
	LOWER BONNET	TX21-01970	RC-08-22	AISI 4130 75K,Per ASTM A29	1	AP023023	860	6.5H	WATER	30	42	690	AIR	/
	STEM	YX2203-1546	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023064	1030	3.5H	WATER	28	32	635	AIR	5.2H
	BALANCE STEM	YX2206-2313	HY220722-1	PH17-4 105K,Per ASTM A564/564M	1	AP023080	1030	3.5H	WATER	28	32	635	AIR	5.2H
	GATE	122V-126	HC2207019-01	AISI 4110 75K,Per ASTM A276/276M	1	AP023119	960	3.0H	OIL	39	51	720	AIR	6.0H
	BODY BUSHING	122V-126	HC2207019-01	AISI 410 75K,Per ASTM A276/276M	2	AP023109	960	3.0H	OIL	39	51	720	AIR	6.0H
Chemical Analysis (wt. %)														
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb
TX21-01970	RC-08-62	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/
TX21-01970	RC-08-30	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/
TX21-01970	RC-08-22	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/
YX2203-1546	HY220722-1	0.023	0.53	0.45	0.030	0.001	15.57	4.56	/	/	/	/	3.64	/
YX2206-2313	HY220722-1	0.022	0.50	0.42	0.031	0.002	15.72	4.07	/	/	/	/	3.63	/
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/
122V-126	HC2207019-01	0.13	0.32	0.30	0.018	0.004	12.50	0.18	/	/	/	/	/	/
Physical Properties														
					Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact(46°C) Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970					/	8"x8"x10"	QTC	672	570	38.0	48.0	53/56/48	222HB	JBW-3008/WDW-300
TX21-01970					/	8"x8"x10"	QTC	691	586	33.0	46.0	58/51/47	220HB	JBW-3008/WDW-300
TX21-01970					/	8"x8"x10"	QTC	684	559	35.0	39.0	53/47/46	220HB	JBW-3008/WDW-300
YX2203-1546					/	ø 80x200	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/WDW-300
YX2206-2313					/	ø 80x200	QTC	981	803	20.5	61.6	84/60/52	32HRC	JBW-3008/WDW-300
122V-126					/	100x100x200	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/WDW-300
122V-126					/	100x100x200	QTC	690	570	23.0	65.0	/	224HB	JBW-3008/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



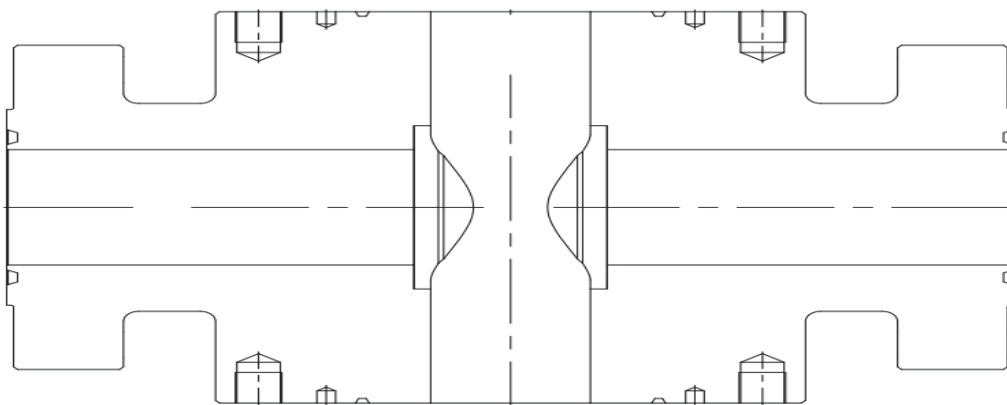
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-0914-006
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023009	RC-08-62	202HB/200HB 198HB/198HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



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[illegible]

Technical drawing showing a cross-section of a mechanical assembly. A central shaft is shown with a pulley or wheel mounted on it. A cable or rope is shown passing over the pulley, with one end extending to the left and the other end extending to the right. The drawing includes various dimensions and labels, such as 'D', 'd', 'r', 'R', 'L', 'L1', 'L2', 'L3', 'L4', 'L5', 'L6', 'L7', 'L8', 'L9', 'L10', 'L11', 'L12', 'L13', 'L14', 'L15', 'L16', 'L17', 'L18', 'L19', 'L20', 'L21', 'L22', 'L23', 'L24', 'L25', 'L26', 'L27', 'L28', 'L29', 'L30', 'L31', 'L32', 'L33', 'L34', 'L35', 'L36', 'L37', 'L38', 'L39', 'L40', 'L41', 'L42', 'L43', 'L44', 'L45', 'L46', 'L47', 'L48', 'L49', 'L50', 'L51', 'L52', 'L53', 'L54', 'L55', 'L56', 'L57', 'L58', 'L59', 'L60', 'L61', 'L62', 'L63', 'L64', 'L65', 'L66', 'L67', 'L68', 'L69', 'L70', 'L71', 'L72', 'L73', 'L74', 'L75', 'L76', 'L77', 'L78', 'L79', 'L80', 'L81', 'L82', 'L83', 'L84', 'L85', 'L86', 'L87', 'L88', 'L89', 'L90', 'L91', 'L92', 'L93', 'L94', 'L95', 'L96', 'L97', 'L98', 'L99', 'L100', 'L101', 'L102', 'L103', 'L104', 'L105', 'L106', 'L107', 'L108', 'L109', 'L110', 'L111', 'L112', 'L113', 'L114', 'L115', 'L116', 'L117', 'L118', 'L119', 'L120', 'L121', 'L122', 'L123', 'L124', 'L125', 'L126', 'L127', 'L128', 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Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



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[illegible]

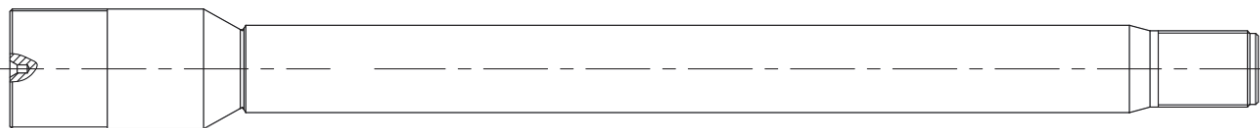
Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



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[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



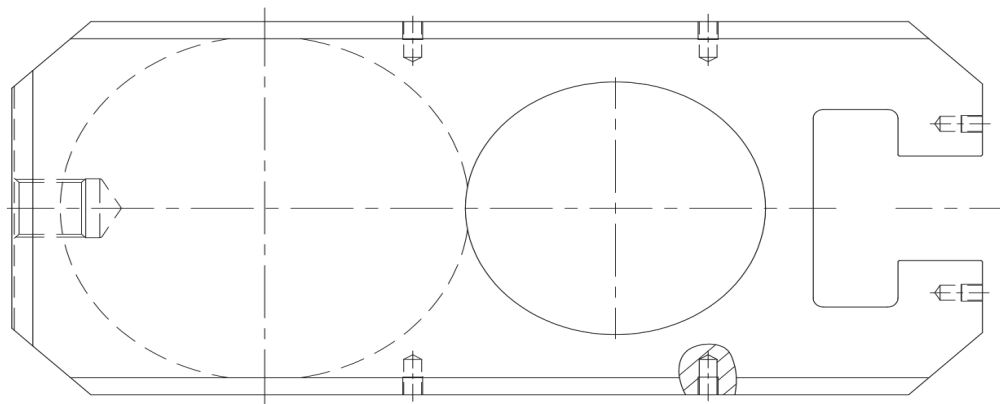
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220822-02
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023119	HC2207019-01	225HB				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of steel ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



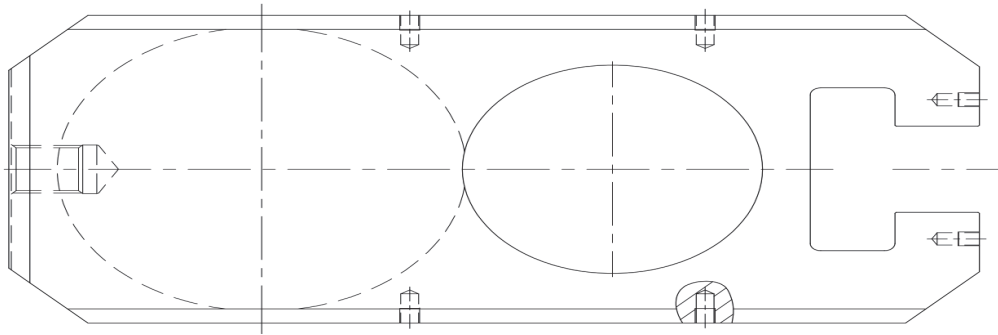
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220822-04
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023119	HC2207019-01	1197HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N). Diameter of steel ball: 10mm		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	/		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP023110	HC2207019-01	98HRB				
2	AP023109	HC2207019-01	99HRB				
Sketch:							
Method Used:							
Acceptable Hardness:		94HRB-99HRB		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



HARDNESS TEST REPORT

11



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[illegible]

Technical drawing of a long, thin mechanical component, likely a shaft or rod. The drawing shows a cross-section at the left end and a small detail at the right end. The component is long and thin, with a central dashed line indicating its length. The left end shows a cross-section with a central hole and a flange. The right end shows a small detail of a hole or feature.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0823-003
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023009	RC-08-62	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ1.6 FBH Block Φ3.2 FBH Block Φ6.4 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14×Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023013	RC-08-30	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-0816-002	
Part No.:	X-182586-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP023023	RC-08-22	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0818-001	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023064	HY220722-1	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-0821-001
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023080	HY220722-1	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0913-001	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023009	RC-08-62	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0902-002	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023013	RC-08-30	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-0831-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023023	RC-08-22	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.09



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q87
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP023119	HC2207019-01	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.08		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H87	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023119	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.08			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2208-Q88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		≥1000Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023110	HC2207019-01	Acceptable					
2	AP023109	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.08			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2208-H88	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023110	HC2207019-01	Acceptable					
2	AP023109	HC2207019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		

LIQUID PENETRATE EXAMINATION

Customer:			Customer PO#:	1298		Date:	September, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	PTP-0827-001	
Part No.:	X-182591-01	Material:	PH17-4-105K			Coating:	/	
Description:	7-1/16"15000psi Balance Stem					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:	10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP023080	HY220722-1	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.08		



HYDROSTATIC TEST REPORT

27



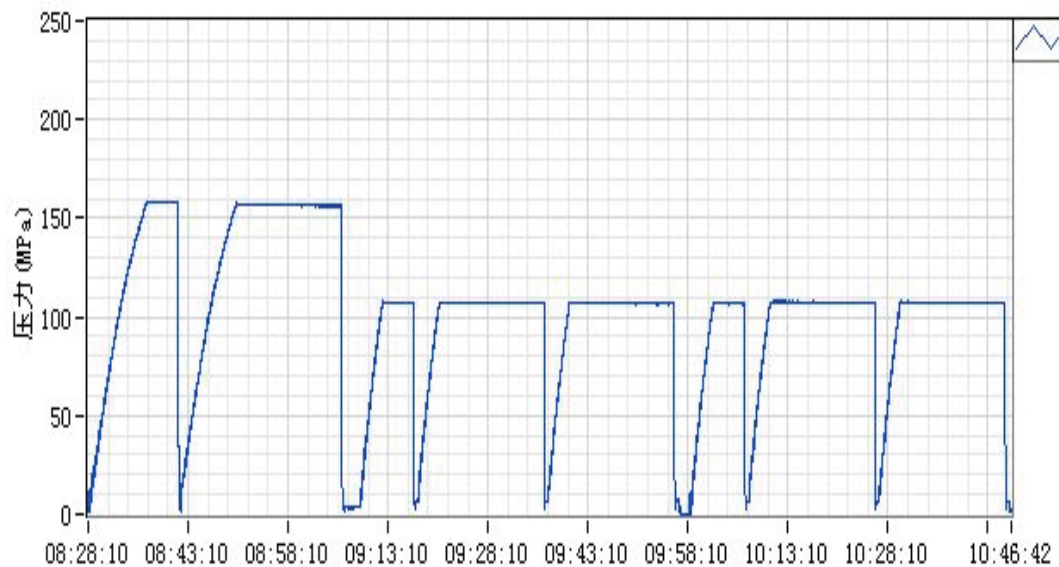
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP023F010	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	1#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	158.4	157.6	4.0	0.7
2	157.3	156.2	15.0	1.0
3	107.3	107.1	4.0	0.2
4	107.4	107.0	15.0	0.4
5	107.3	106.9	15.0	0.3
6	107.1	106.7	4.0	0.4
7	107.9	107.3	15.0	0.5
8	107.6	107.3	15.0	0.3



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.09.14



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F021

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F021

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1335	HYDRAULIC GATE VALVE		PFY105/180-00	AP033F021	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
Description			Melting Practice			Quenched			Heat Treatment			Physical Properties												
P/N	Parts	Melt No.	H.T. No.	Material Spec Standards	Q	Serial No.		Medium	Start Temp	Finish Temp	Temper(1)		Temper(2)											
						Finished	Time (min)				Time (min)	Temp (°C)	Time (min)	Temp (°C)										
PFY105/180-00	BODY	2023755	HY221006-2	AISI 4130 75K,Per ASTM A29	1	AP033168	Forging	WATER	26	29	670	7.7H	AIR	/	/									
	UPPER BONNET	2016841Z	RC-0929-092	AISI 4130 75K,Per ASTM A29	1	AP033179	Forging	WATER	22	25	650	8.0H	AIR	/	/									
	LOWER BONNET	2016841Z	RC-09-54	AISI 4130 75K,Per ASTM A29	1	AP033192	Forging	WATER	28	39	675	8.5H	AIR	/	/									
	STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033241	Forging	WATER	25	28	630	5.2H	AIR	630	AIR									
	BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033249	Forging	WATER	26	29	630	5.0H	AIR	630	AIR									
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033304	Forging	OIL	39	51	720	6.0H	AIR	680	AIR									
	BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033277	Forging	OIL	39	51	720	6.0H	AIR	680	AIR									
Melt No.	H.T. No.	Chemical Analysis (wt. %)										Physical Properties				Impact (46°C)	Equipment Type							
		C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe			Spec	Yield	Tensile	Elongatio	ROA (%)	n (%)	Impact direction (Transverse)
2023755	HY221006-2	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	QTC	548	719	24.6	63.0	31.0	52/67/73	222HBW	JBW-3008/WDW-300
2016841Z	RC-0929-092	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	535	700	31.0	66.0	31.0	32/41/59	230HBW	JBW-3008/WDW-300
2016841Z	RC-09-54	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	565	676	45.0	49.0	45.0	57/55/48	221HBW	JBW-3008/WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	QTC	955	1072	19.7	60.4	19.7	49/42/31	32HRC	JBW-3008/WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	QTC	964	1084	21.3	60.7	21.3	35/41/46	30HRC	JBW-3008/WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	590	700	23.0	67.0	23.0	/	224HBW	JBW-3008/WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	590	700	23.0	67.0	23.0	/	224HBW	JBW-3008/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



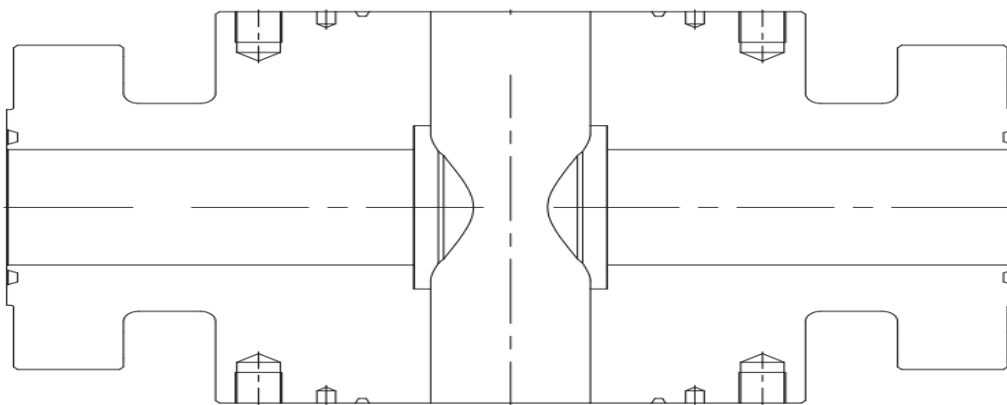
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033168	HY221006-2	212HBW/213HBW 216HBW/212HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



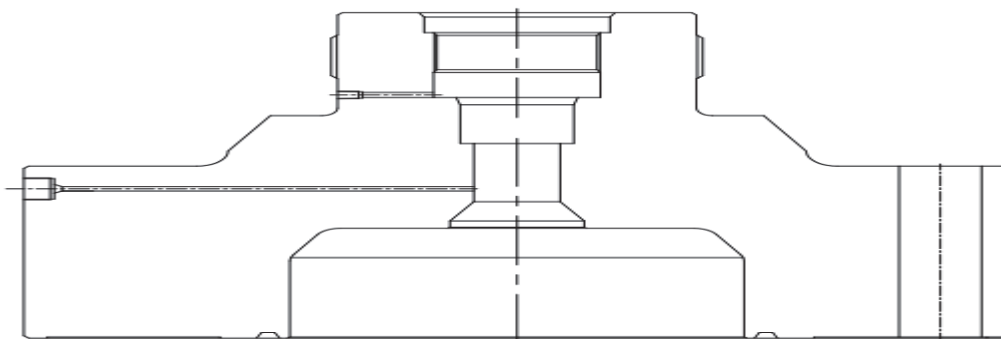
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033179	RC-0929-092	210HBW/209HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



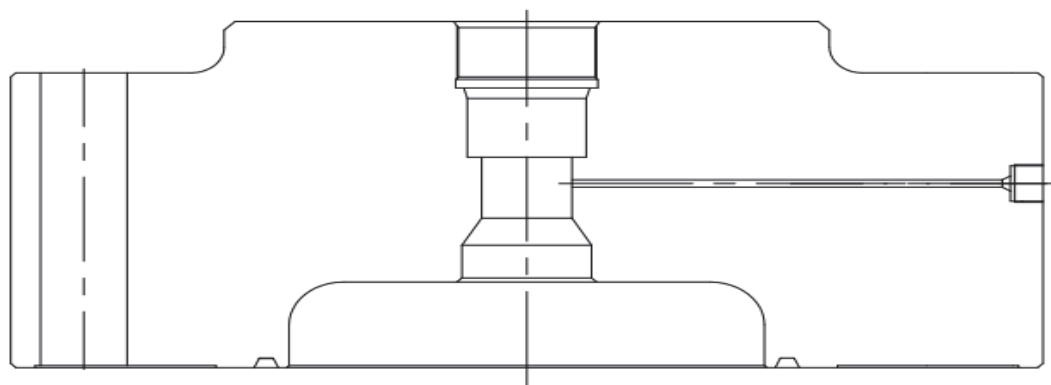
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033192	RC-09-54	208HBW/208HBW					

Sketch:



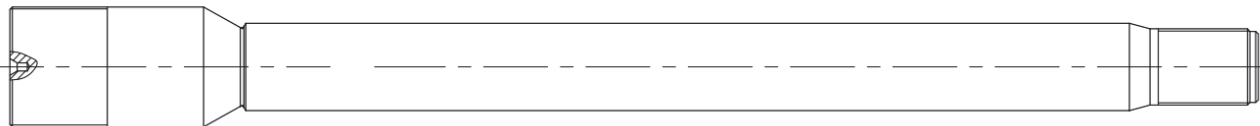
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a piston or cylinder head, showing a cross-section with a central bore and a side port. The drawing includes a top view (left) and a side view (right), with dimensions and a scale bar.

8



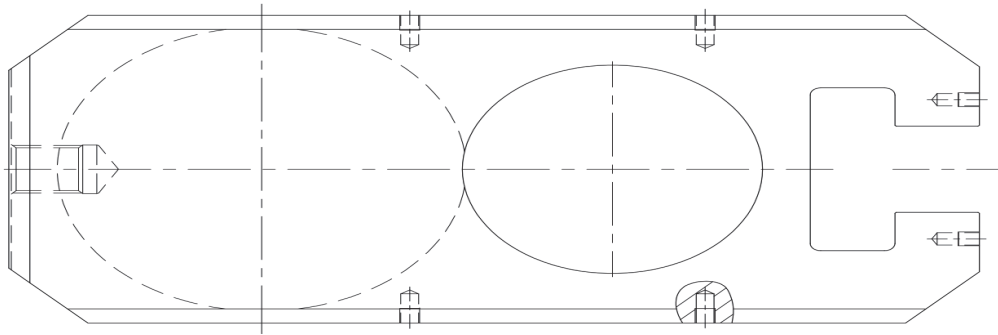
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220930-03
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033304	HC2209019-01	1171HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	WC		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033277	HC2209019-01	1197HV				
2	AP033284	HC2209019-01	1171HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



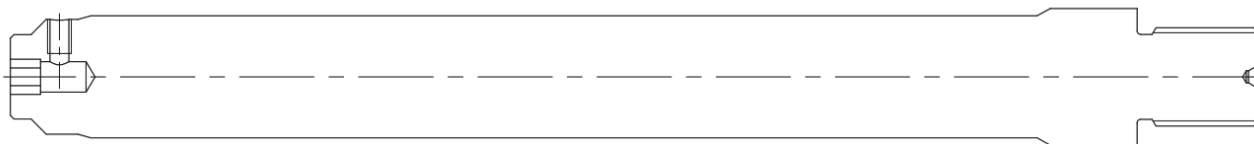
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:	1335		Date:	November , 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E18	API Monogram:	6A-2074	Report #:	HP-1025-007
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033249	HY220918-2	30HRC				

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		





安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033179	RC-0929-092	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033192	RC-09-54	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033241	HY221003-3	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033249	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3310Uw/cm ²		
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033168	HY221006-2	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:	Found to be satisfactory								
Inspected by:	Dongkai Xu			Organization:	QC Department				
Approved by:	Xin Zheng			Date:	2022.10				
NDT Level:	MT II								



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033192	RC-09-54	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		

LIQUID PENETRATE EXAMINATION

[illegible]

Inspection Coverage:

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geqslant 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033304	HC2209019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:	Found to be satisfactory							
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



LIQUID PENETRATE EXAMINATION

23



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		≥1000Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033277	HC2209019-01	Acceptable					
2	AP033284	HC2209019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033277	HC2209019-01	Acceptable					
2	AP033284	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



LIQUID PENETRATE EXAMINATION

26



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F021		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033168	HY221006-2	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

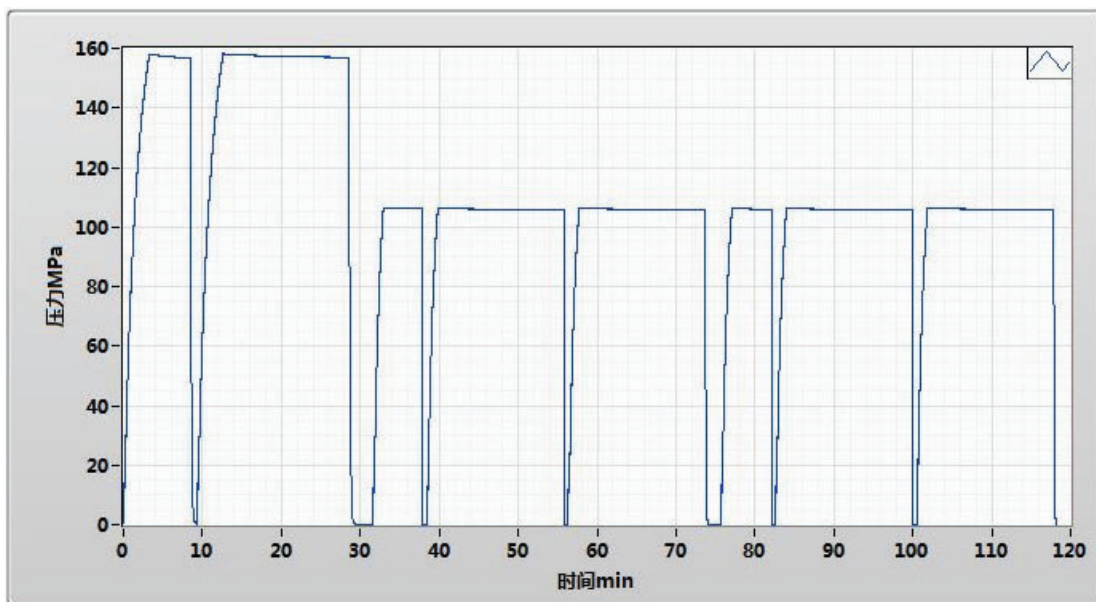
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F021	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.59	156.65	4.0	0.94
2	157.95	156.94	15.0	1.01
3	106.22	106.11	4.0	0.10
4	106.15	105.86	15.0	0.29
5	106.14	105.86	15.0	0.27
6	106.12	105.91	4.0	0.21
7	106.14	105.73	15.0	0.41
8	106.15	105.86	15.0	0.29



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.10.29



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F022

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F022

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer	PO No.	Product	P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications													
	1335	HYDRAULIC GATE VALVE	PFFY105/180-00	AP033F022	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st													
P/N	Parts	Description		Melting Practice			Heat Treatment			Physical Properties														
		Melt No.	H.T. No.	Material Spec Standards	Q	Austenized		Quenched		Temper(1)		Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type										
						Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp				Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium			
			BODY	2023755	RC-10-18	AISI 4130 75K,Per ASTM A29	1	AP033172	Forging	865	6.0H	WATER	26	37	680	AIR	7.7H	AIR	/	/	/			
			UPPER BONNET	2016841Z	RC-0929-092	AISI 4130 75K,Per ASTM A29	1	AP033182	Forging	870	5.0H	WATER	22	25	650	AIR	8.0H	AIR	/	/	/			
			LOWER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033187	Forging	870	6.5H	WATER	20	24	660	AIR	10.0H	AIR	/	/	/			
			STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033239	Forging	1030	3.5H	WATER	25	28	630	AIR	5.2H	AIR	630	5.0H	AIR			
			BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033246	Forging	1030	3.5H	WATER	26	29	630	AIR	5.0H	AIR	630	5.0H	AIR			
P/N	Parts	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033296	Forging	960	3.0H	OIL	39	51	720	AIR	6.0H	AIR	680	6.0H	AIR				
		BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033273 AP033287	Forging	960	3.0H	OIL	39	51	720	AIR	6.0H	AIR	680	6.0H	AIR				
		Chemical Analysis (wt. %)																						
		Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C)	Hardness
	2023755	RC-10-18	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	QTC	686	558	40.0	57.0	67/59/46	222HBW	JBW-3008/ WDW-300
	2016841Z	RC-0929-092	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
	2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
	YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-3008/ WDW-300
	YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-3008/ WDW-300
	121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300
	121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



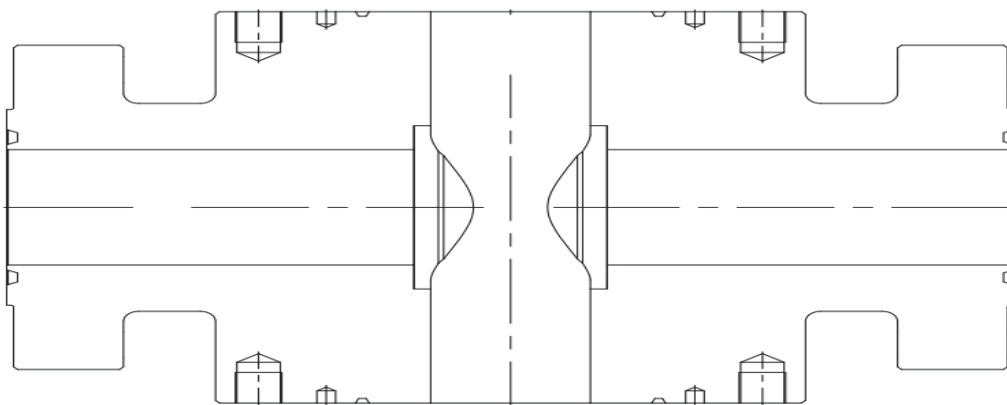
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033172	RC-10-18	209HBW/212HBW 219HBW/217HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



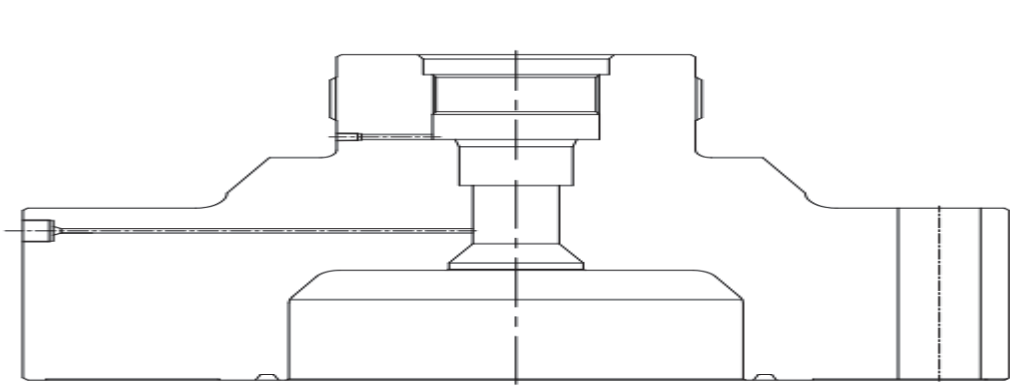
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033182	RC-0929-092	213HBW/209HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



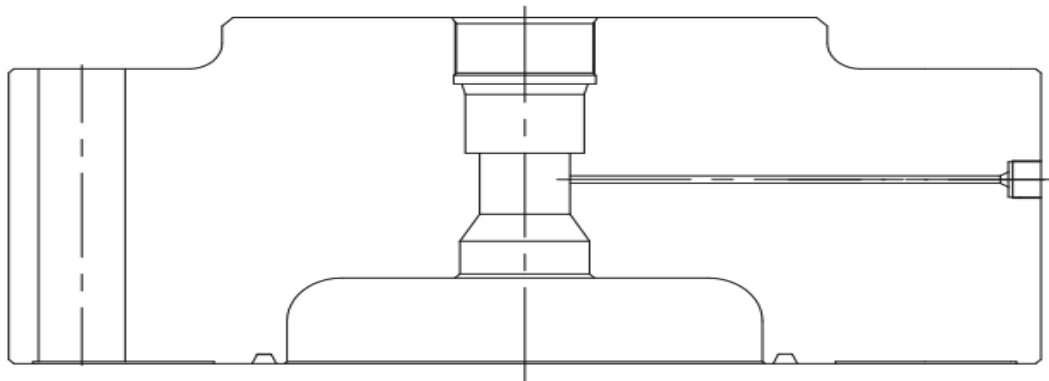
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033187	RC-0921-060	213HBW/217HBW					

Sketch:



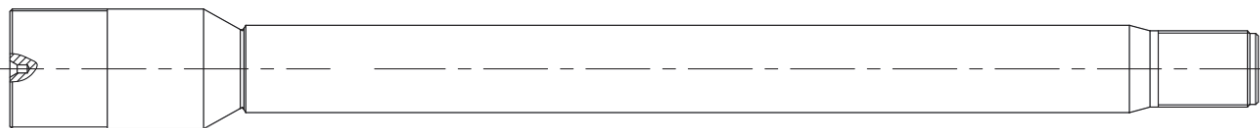
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



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[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



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[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

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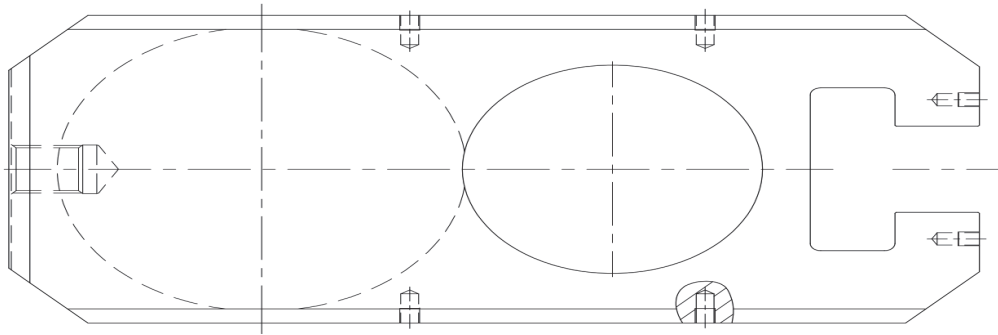
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220930-03
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033296	HC2209019-01	1197HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220930-04
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Body bushing					Quantity:	2
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033273	HC2209019-01	1197HV				
2	AP033287	HC2209019-01	1171HV				
Sketch:							
Method Used:		Impact Energy: 5Kg-f(49.03N).					
Acceptable Hardness:		≥1050HV		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



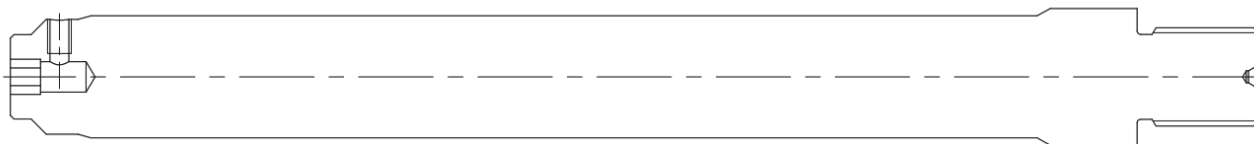
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:		Customer PO#:	1335	Date:	November, 2022		
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E18	API Monogram:	6A-2074	Report #:	HP-1025-007
Part No.:	X-182591-01	Material:	PH17-4 105K	Coating:	/		
Description:	7-1/16"15000psi Balance Stem				Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033246	HY220918-2	29HRC				

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1008-005	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033172	RC-10-18	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE			Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block			Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st			Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB			Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033182	RC-0929-092	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033187	RC-0921-060	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033239	HY221003-3	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033246	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1027-001	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033182	RC-0929-092	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033187	RC-0921-060	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		

LIQUID PENETRATE EXAMINATION

[illegible]

Inspection Coverage:

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033296	HC2209019-01	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H57
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Gate					Quantity:	1
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033296	HC2209019-01	Acceptable				
Inspection Coverage:							
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:		Found to be satisfactory					
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2209-Q58	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:			3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:			≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033273	HC2209019-01	Acceptable						
2	AP033287	HC2209019-01	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033273	HC2209019-01	Acceptable					
2	AP033287	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	PTP-1021-001	
Part No.:	X-182591-01	Material:	PH17-4-105K			Coating:	/	
Description:	7-1/16"15000psi Balance Stem					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:	10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033246	HY220918-2	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.10			



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F022		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033172	RC-10-18	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



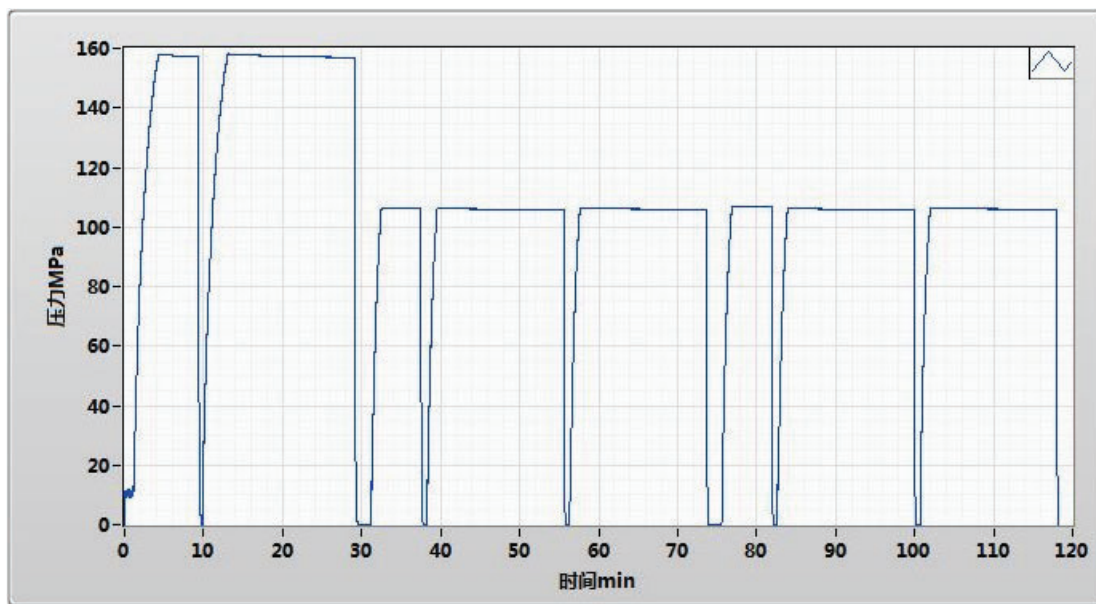
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F022	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.83	157.16	4.0	0.67
2	157.95	157.01	15.0	0.94
3	106.05	105.95	4.0	0.10
4	106.17	105.88	15.0	0.30
5	106.17	105.90	15.0	0.27
6	107.15	106.92	4.0	0.23
7	106.14	105.75	15.0	0.38
8	106.09	105.84	15.0	0.25



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.10.31



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F023

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F023

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1335	HYDRAULIC GATE VALVE		PFFY105/180-00	AP033F023	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
Heat Treatment																								
P/N	Parts	Description		Melting Practice			Austenitized		Quenched		Temper(1)		Temper(2)											
		Melt No.	H.T. No.	Material Spec Standards	Q	t	y	Serial No.	Finished	Temp (°C)	Time (min)	Start Temp	Temp (°C)	Time (min)	Temp (°C)									
PFFY105/180-00	BODY	2023755	HY221002-2	AISI 4130 75K,Per ASTM A29	1		AP033163	Forging	870	5.6H	WATER	29	33	670	7.5H	AIR	/	/						
	UPPER BONNET	2016841Z	RC-0929-092	AISI 4130 75K,Per ASTM A29	1		AP033180	Forging	870	5.0H	WATER	22	25	650	8.0H	AIR	/	/						
	LOWER BONNET	2016841Z	RC-09-54	AISI 4130 75K,Per ASTM A29	1		AP033191	Forging	860	5.5H	WATER	28	39	675	8.5H	AIR	/	/						
	STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1		AP033244	Forging	1030	3.5H	WATER	25	28	630	5.2H	AIR	630	AIR						
	BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1		AP033247	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	AIR						
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1		AP033294	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	AIR						
	BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2		AP033272	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	AIR						
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact direction (Transverse)	Hardness	Equipment Type
2023755	HY221002-2	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	8"x8"x10"	QTC	719	548	24.6	63.0	52/67/73	222HBW	JBW-3008/WDW-300
2016841Z	RC-0929-092	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/WDW-300
2016841Z	RC-09-54	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	676	565	45.0	49.0	57/55/48	221HBW	JBW-3008/WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	ø 80x200	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-3008/WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	ø 80x200	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-3008/WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng
NAME of QA Manager, for and on the authority of COMPANY NAME



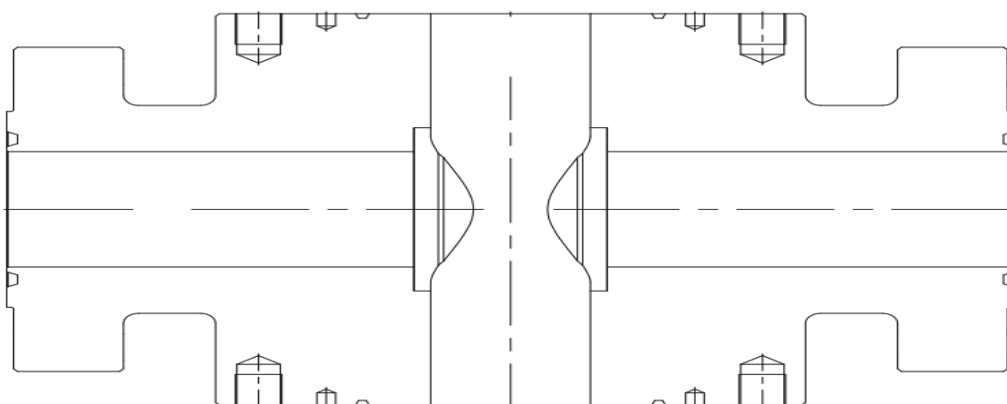
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033163	HY221002-2	202HBW/211HBW 213HBW/219HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



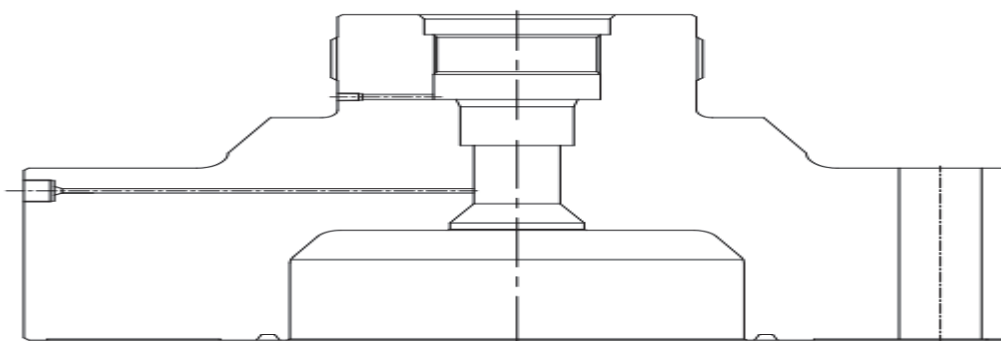
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033180	RC-0929-092	216HBW/213HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



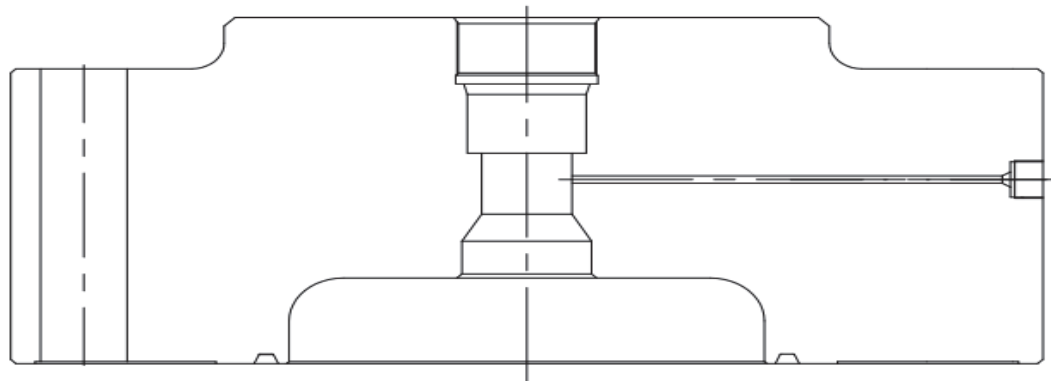
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033191	RC-09-54	212HBW/209HBW					

Sketch:



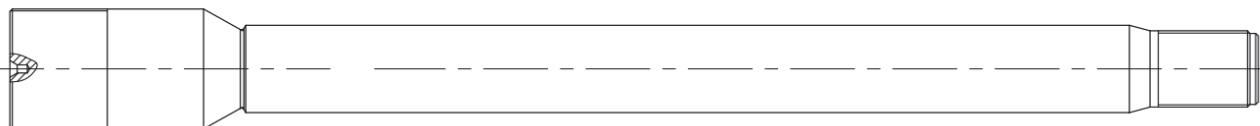
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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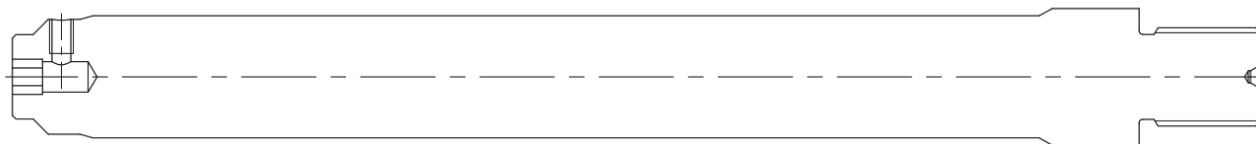
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	WC		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033270	HC2209019-01	1197HV				
2	AP033272	HC2209019-01	1197HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



HARDNESS TEST REPORT

Sketch:

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1004-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033163	HY221002-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ1.6 FBH Block Φ3.2 FBH Block Φ6.4 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033180	RC-0929-092	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033191	RC-09-54	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033244	HY221003-3	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033247	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033163	HY221002-2	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu			Organization:		QC Department	
Approved by:		Xin Zheng						
NDT Level:		MT II			Date:		2022.10	



MAGNETIC PARTICLE INSPECTION REPORT

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MAGNETIC PARTICLE INSPECTION REPORT

Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033294	HC2209019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033294	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2209-Q58	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:			3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:			≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033270	HC2209019-01	Acceptable						
2	AP033272	HC2209019-01	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033270	HC2209019-01	Acceptable					
2	AP033272	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-1021-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033247	HY220918-2	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:	QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:	2022.10			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F023		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033163	HY221002-2	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



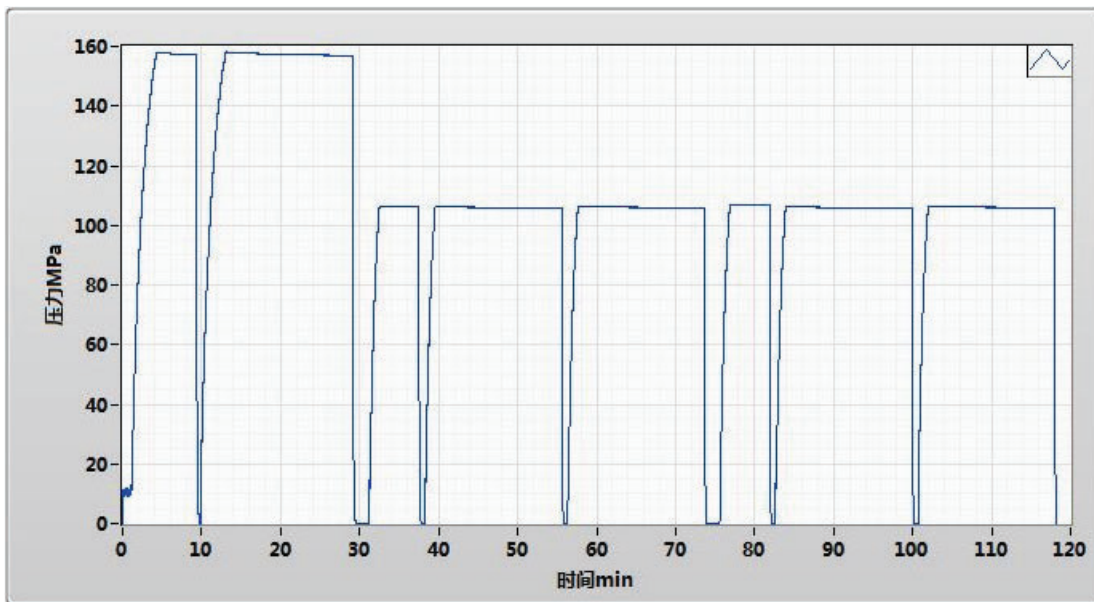
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F023	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.78	157.05	4.0	0.73
2	157.92	156.92	15.0	1.01
3	106.18	106.10	4.0	0.08
4	106.15	105.90	15.0	0.25
5	106.18	105.95	15.0	0.23
6	106.92	106.72	4.0	0.20
7	106.17	105.81	15.0	0.36
8	106.21	105.94	15.0	0.27



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.10.31



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F024

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F024

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1335	HYDRAULIC GATE VALVE		PFFY105/180-00	AP033F024	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
		Description			Melting Practice			Heat Treatment																
P/N	Parts	Melt No.	H.T. No.	Material Spec Standards	Q	Austenitized		Quenched		Temper(1)		Temper(2)												
						Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)							
PFFY105/180-00	BODY	2023755	RC-10-18	AISI 4130 75K,Per ASTM A29	1	AP033171	Forging	865	6.0H	WATER	26	680	7.7H	AIR	/	/								
	UPPER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033177	Forging	870	6.5H	WATER	20	660	10.0H	AIR	/	/								
	LOWER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033186	Forging	870	6.5H	WATER	20	660	10.0H	AIR	/	/								
	STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033242	Forging	1030	3.5H	WATER	25	630	5.2H	AIR	630	5.0H								
	BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033256	Forging	1030	3.5H	WATER	26	630	5.0H	AIR	630	5.0H								
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033301	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
	BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033282 AP033289	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H							
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
2023755	RC-10-18	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	8"x8"x10"	QTC	686	558	40.0	57.0	67/59/46	222HBW	JBW-3008/ WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	ø 80x200	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-3008/ WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	ø 80x200	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



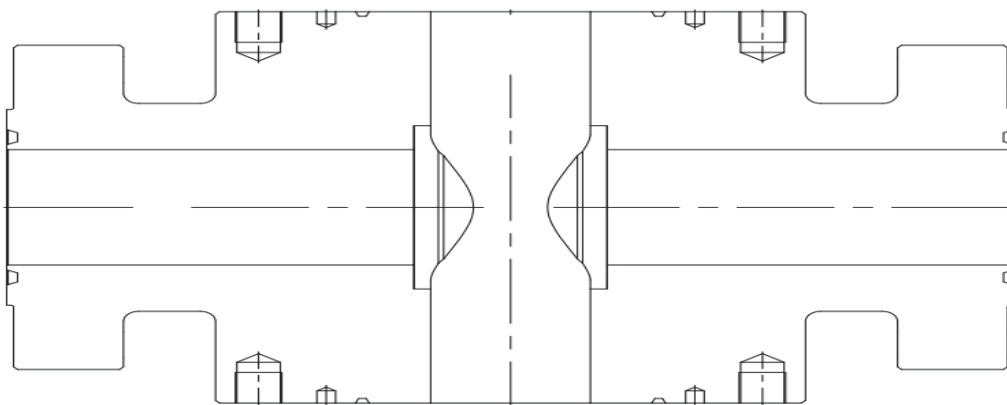
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033171	RC-10-18	216HBW/209HBW 202HBW/213HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



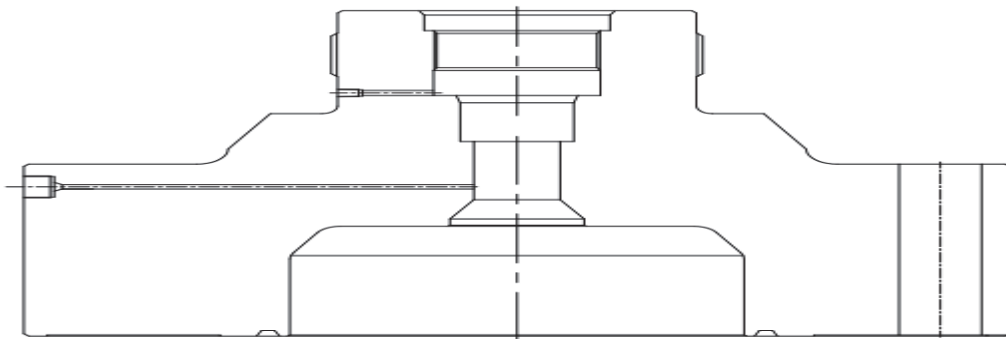
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033177	RC-0921-060	220HBW/210HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



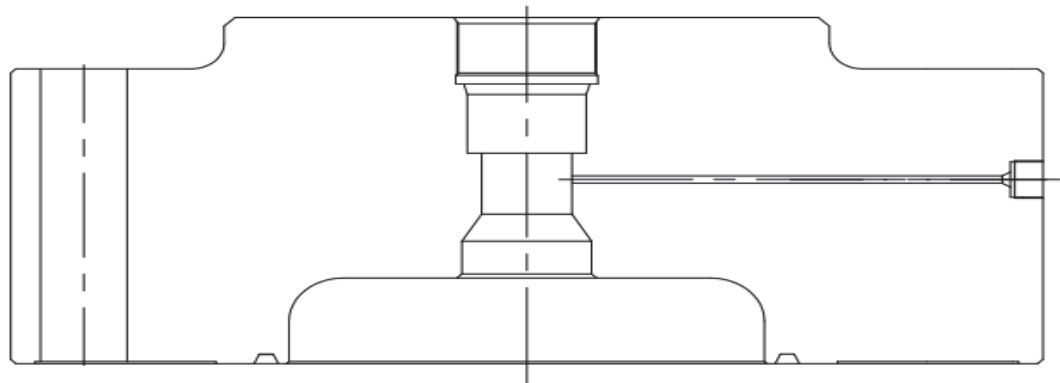
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033186	RC-0921-060	207HBW/211HBW					

Sketch:



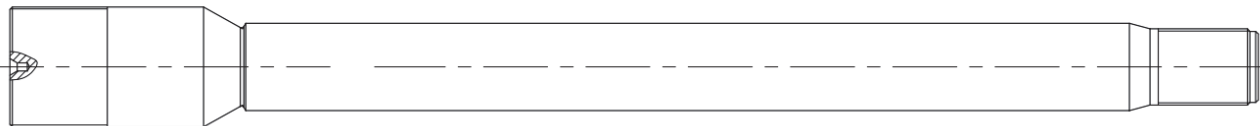
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or housing, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:			
Acceptable Hardness:	94HRB-99HRB	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:			Date:		
							2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220930-04	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body bushing					Quantity:	2	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033282	HC2209019-01	1171HV					
2	AP033269	HC2209019-01	1171HV					
Sketch:								
Method Used:		Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:		≥1050HV		Approved By:			Examined By:	
Judgments:		[V] Conforms		Xin zheng			Zhengguo Yao	
		[] Does Not Conform						



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[illegible]

Technical drawing showing the front view of a mechanical part. The part has a total length of 100 units. On the left end, there is a flange with a diameter of 60 units and a thickness of 10 units. A central hole with a diameter of 10 units runs through the entire length of the part. The main body of the part has a diameter of 80 units. There are two small holes, each with a diameter of 10 units, located on the right side of the part, spaced 10 units apart from each other and 10 units from the right edge.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1008-005	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033171	RC-10-18	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE			Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block			Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st			Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB			Level as per UT:	II	



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ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033177	RC-0921-060	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033186	RC-0921-060	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033242	HY221003-3	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033256	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP033171	RC-10-18	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1027-001	
Part No.:	X-182585-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
1	AP033177	RC-0921-060	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033186	RC-0921-060	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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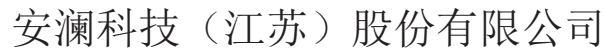
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033301	HC2209019-01	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.09		



LIQUID PENETRATE EXAMINATION

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

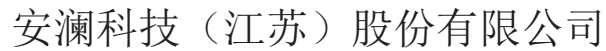
MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2209-Q58	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$		
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033282	HC2209019-01	Acceptable						
2	AP033269	HC2209019-01	Acceptable						
Inspection Coverage: Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033282	HC2209019-01	Acceptable					
2	AP033269	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



LIQUID PENETRATE EXAMINATION

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安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F024		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033171	RC-10-18	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

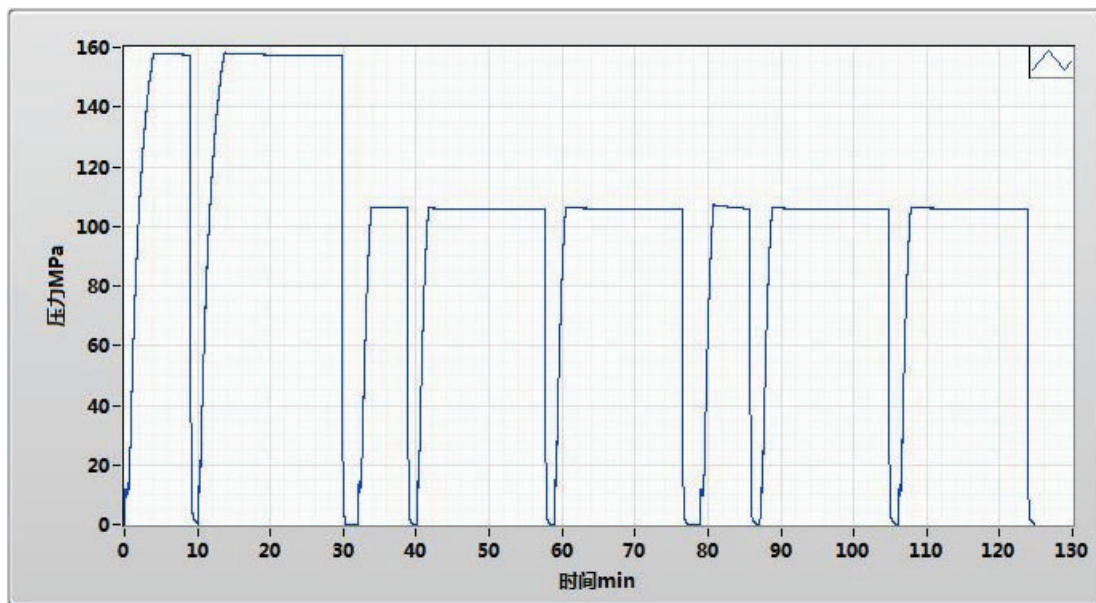
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F024	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.91	157.52	4.0	0.39
2	157.97	157.18	15.0	0.79
3	106.16	106.05	4.0	0.11
4	106.03	105.69	15.0	0.33
5	106.11	105.80	15.0	0.32
6	106.84	105.83	4.0	1.01
7	106.09	105.59	15.0	0.51
8	106.14	105.77	15.0	0.37



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.10.31



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F025

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F025

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product	P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications														
		1335	HYDRAULIC GATE VALVE	PFFY105/180-00	AP033F025	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st														
P/N	Parts	Description		Melting Practice			Heat Treatment			Temper(1)			Temper(2)													
		Melt No.	H.T. No.	Material Spec Standards	Q	Serial No.	Finished	Austenized	Quenched	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium											
PFFY105/180-00	BODY	2023755	HY221002-2	AISI 4130 75K,Per ASTM A29	1	AP033161	Forging	870	5.6H	WATER	29	33	670	7.5H	AIR	/	/									
	UPPER BONNET	2016841Z	RC-0929-092	AISI 4130 75K,Per ASTM A29	1	AP033184	Forging	870	5.0H	WATER	22	25	650	8.0H	AIR	/	/									
	LOWER BONNET	2016841Z	RC-09-54	AISI 4130 75K,Per ASTM A29	1	AP033196	Forging	860	5.5H	WATER	28	39	675	8.5H	AIR	/	/									
	STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033243	Forging	1030	3.5H	WATER	25	28	630	5.2H	AIR	630	5.0H	AIR								
	BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033253	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H	AIR								
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033288	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	AIR								
	BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033271 AP033291	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	AIR								
Chemical Analysis (wt. %)																										
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact(46°C) Impact direction (Transverse)	Hardness	Equipment Type		
		2023755	HY221002-2	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	8"x8"x10"	QTC	719	548	24.6	63.0	52/67/73	222HBW	JBW-3008/ WDW-300
		2016841Z	RC-0929-092	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
		2016841Z	RC-09-54	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	676	565	45.0	49.0	57/55/48	221HBW	JBW-3008/ WDW-300
		YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	ø 80x200	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-3008/ WDW-300
		YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	ø 80x200	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-3008/ WDW-300
		121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300		

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



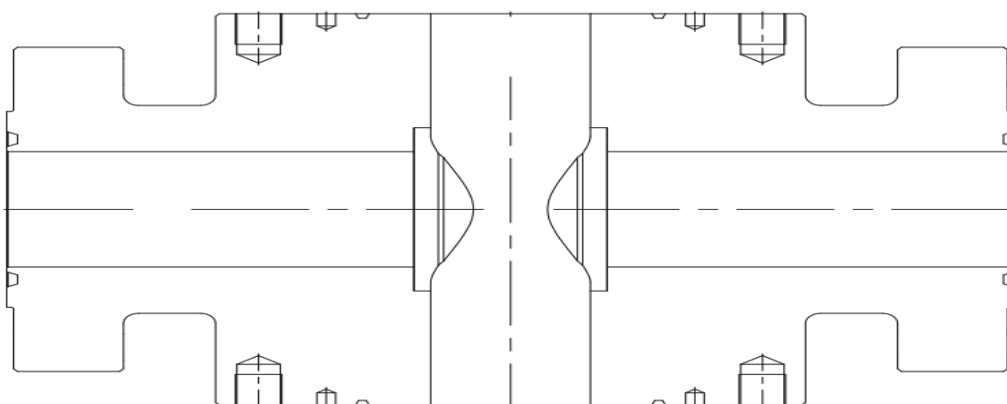
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033161	HY221002-2	205HBW/209HBW 211HBW/216HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



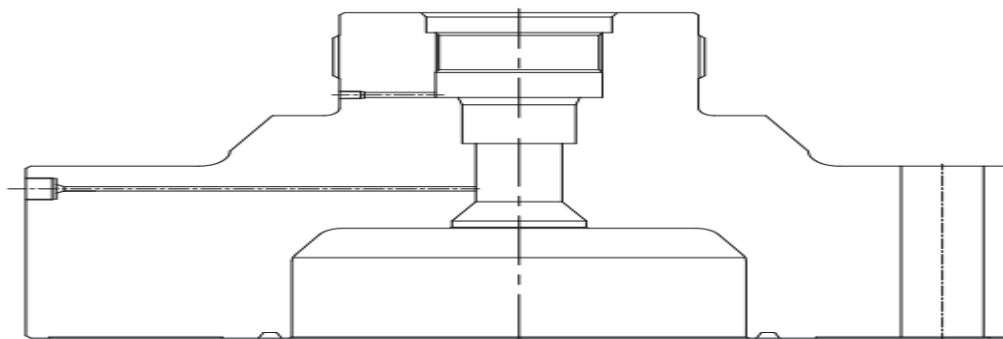
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033184	RC-0929-092	209HBW/209HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



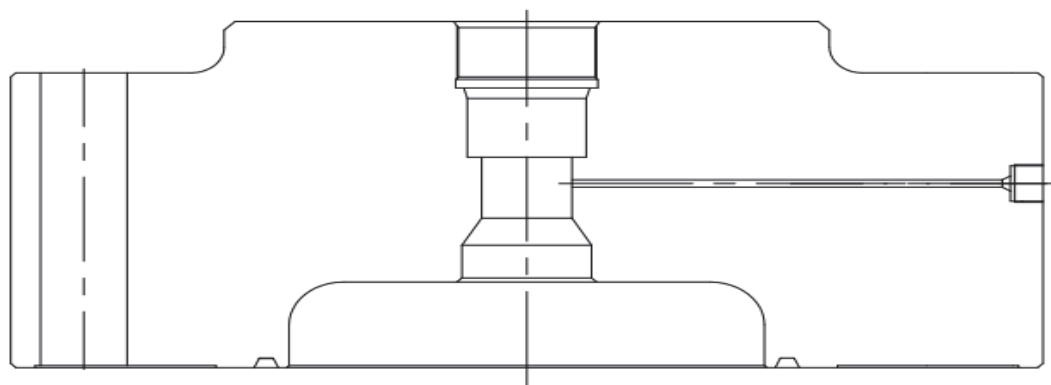
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033196	RC-09-54	204HBW/208HBW					

Sketch:



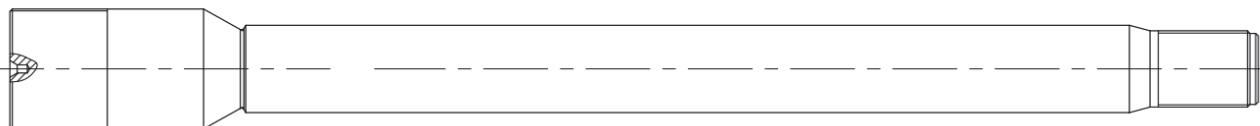
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or housing, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or housing, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

10



HARDNESS TEST REPORT

11

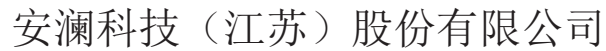


ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a shaft with a keyway and a pulley hub. The drawing shows a side view of the shaft with a keyway. A dashed line indicates the center of the shaft. The pulley hub is shown on the right side of the shaft. The drawing includes dimensions and a section line.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



ULTRASONIC EXAMINATION REPORT

ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033184	RC-0929-092	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1005-004
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033196	RC-09-54	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II
Equipment:	MUT-800C		Couplant:	OIL			
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033243	HY221003-3	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033253	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



MAGNETIC PARTICLE INSPECTION REPORT

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MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1027-001	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033184	RC-0929-092	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:			2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:			3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033196	RC-09-54	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033298	HC2209019-01	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.09		



LIQUID PENETRATE EXAMINATION

23



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2209-Q58	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$		
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033271	HC2209019-01	Acceptable						
2	AP033291	HC2209019-01	Acceptable						
Inspection Coverage: Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:	Found to be satisfactory								
Inspected by:	Dongkai Xu			Organization:	QC Department				
Approved by:	Xin Zheng			Date:	2022.09				
NDT Level:	MT II								



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033271	HC2209019-01	Acceptable					
2	AP033291	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-1021-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033253	HY220918-2	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu		Organization:		QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II		Date:		2022.10			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F025		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033161	HY221002-2	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

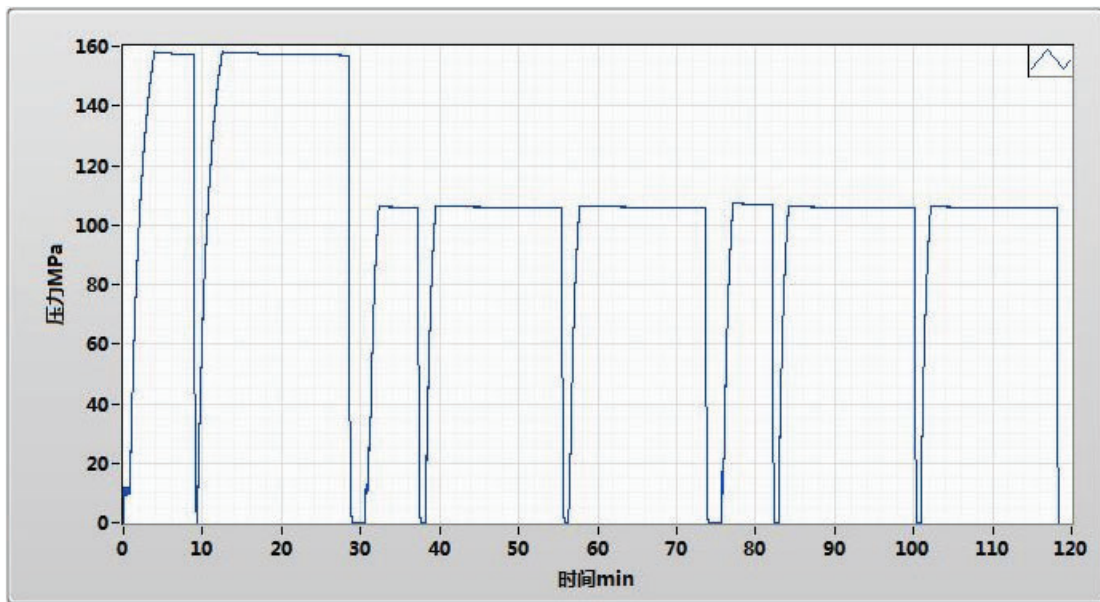
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F025	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	157.83	157.16	4.0	0.67
2	157.95	157.01	15.0	0.94
3	106.05	105.95	4.0	0.10
4	106.17	105.88	15.0	0.30
5	106.17	105.90	15.0	0.27
6	107.15	106.92	4.0	0.23
7	106.14	105.75	15.0	0.38
8	106.09	105.84	15.0	0.25



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.10.31



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F026

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
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安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F026

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product	P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1335	HYDRAULIC GATE VALVE	PPFY105/180-00	AP033F026	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
P/N	Parts	Description		Melting Practice				Heat Treatment				Temper(1)		Temper(2)									
		Melt No.	H.T. No.	Material Spec Standards	Q	Serial No.	Finished	Austenized	Quenched	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)									
		2023755	RC-10-18	ASTM A29	1	AP033170	Forging	865	6.0H	WATER	26	37	680	7.7H	AIR								
		2016841Z	RC-0929-092	ASTM A29	1	AP033183	Forging	870	5.0H	WATER	22	25	650	8.0H	AIR								
		2016841Z	RC-09-54	ASTM A29	1	AP033194	Forging	860	5.5H	WATER	28	39	675	8.5H	AIR								
		YX2208-2018	HY221003-3	ASTM A564/564M	1	AP033238	Forging	1030	3.5H	WATER	25	28	630	5.2H	AIR								
		YX2206-2314	HY220918-2	ASTM A564/564M	1	AP033251	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR								
BALANCE STEM		121V-1193	HC2209019-01	ASTM A276/276M	1	AP033297	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR								
BODY BUSHING		121V-1193	HC2209019-01	ASTM A276/276M	2	AP033292	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR								
Chemical Analysis (wt. %)																							
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec	Yield	Tensile	Elongatio	ROA (%)	Impact direction	Hardness	Equipment Type
2023755	RC-10-18	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	QTC	558	686	40.0	57.0	67/59/46	222HBW	JBW-3008/WDW-300
2016841Z	RC-0929-092	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	535	700	31.0	66.0	32/41/59	230HBW	JBW-3008/WDW-300
2016841Z	RC-09-54	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	565	676	45.0	49.0	57/55/48	221HBW	JBW-3008/WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	QTC	955	1072	19.7	60.4	49/42/31	32HRC	JBW-3008/WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	QTC	964	1084	21.3	60.7	35/41/46	30HRC	JBW-3008/WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	590	700	23.0	67.0	/	224HBW	JBW-3008/WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	590	700	23.0	67.0	/	224HBW	JBW-3008/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



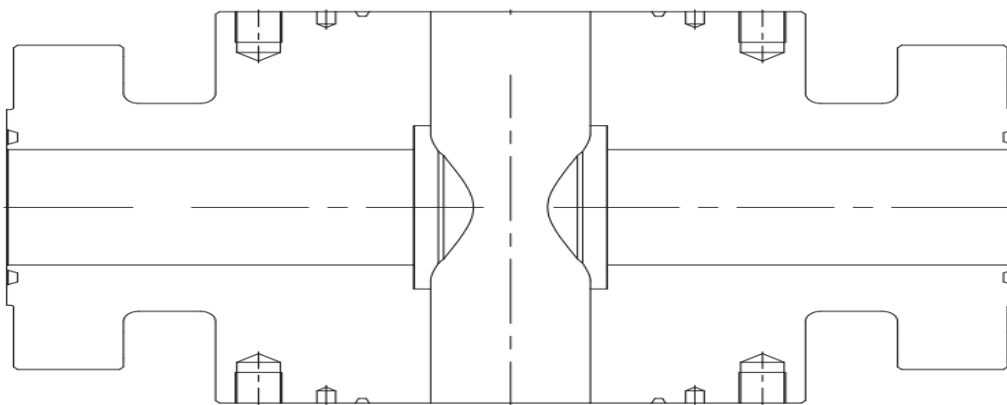
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033170	RC-10-18	209HBW/212HBW 217HBW/219HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



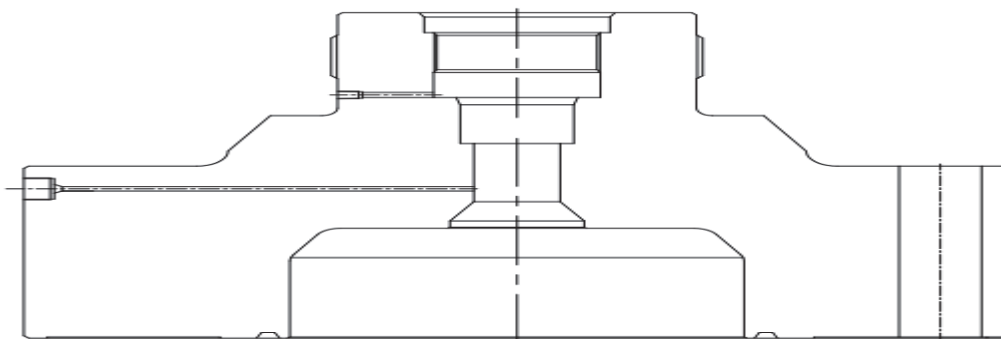
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033183	RC-0929-092	222HBW/222HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



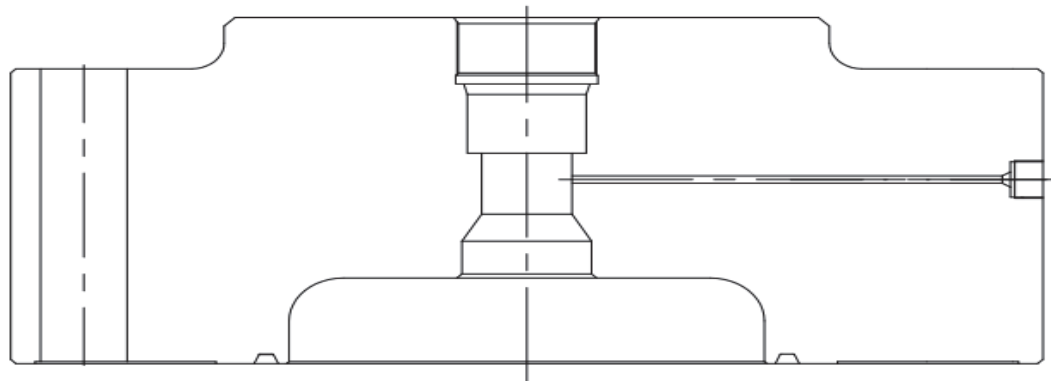
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033194	RC-09-54	209HBW/210HBW					

Sketch:



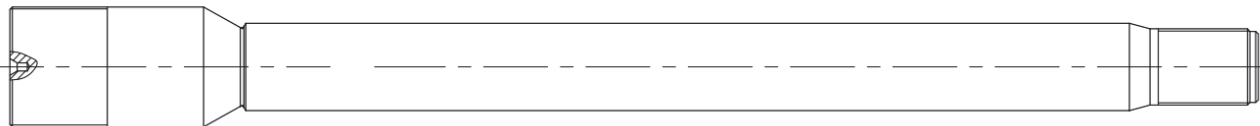
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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HARDNESS TEST REPORT

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HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a shaft with a keyway and a pulley hub. The drawing shows a shaft with a keyway and a pulley hub. The shaft has a diameter of 10 mm and a length of 100 mm. The pulley hub has a diameter of 100 mm and a length of 20 mm. The shaft is shown with a dashed centerline. The pulley hub is shown with a solid line. The drawing is a cross-section view.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



ULTRASONIC EXAMINATION REPORT

ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033183	RC-0929-092	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1005-004
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033194	RC-09-54	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033238	HY221003-3	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033251	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



MAGNETIC PARTICLE INSPECTION REPORT

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MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1027-001	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033183	RC-0929-092	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033194	RC-09-54	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		

LIQUID PENETRATE EXAMINATION

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	PTP-1021-002	
Part No.:	X-182716-01	Material:	PH17-4-105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033238	HY221003-3	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033297	HC2209019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033297	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-1021-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033251	HY220918-2	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu		Organization:		QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II		Date:		2022.10			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F026		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033170	RC-10-18	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

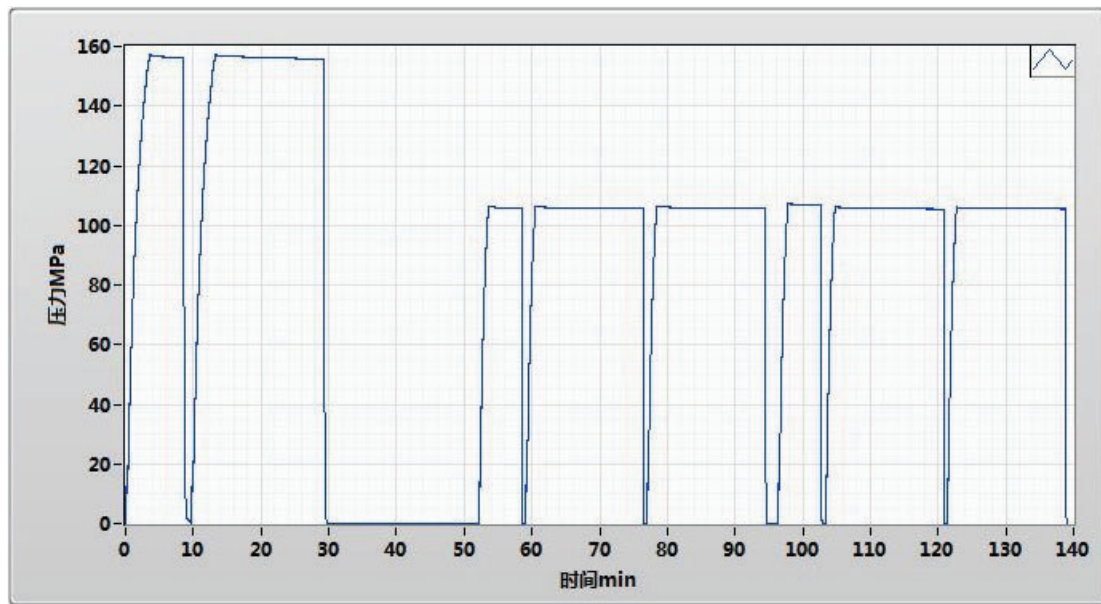
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F026	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.76	155.97	4.0	0.79
2	156.91	155.79	15.0	1.12
3	106.05	105.72	4.0	0.33
4	106.09	105.51	15.0	0.57
5	106.10	105.64	15.0	0.46
6	107.07	106.79	4.0	0.27
7	106.01	105.47	15.0	0.54
8	105.93	105.50	15.0	0.43



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.01



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F027

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F027

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer	PO No.	Product	P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications												
	1335	HYDRAULIC GATE VALVE	PFFY105/180-00	AP033F027	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st												
P/N	Parts	Description		Melting Practice			Heat Treatment			Physical Properties													
		Melt No.	H.T. No.	Material Spec Standards	Q t y	Austenized		Quenched		Temper(1)		Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type									
						Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp				Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium		
			BODY	2023755	HY221002-2	AISI 4130 75K,Per ASTM A29	1	AP033164	Forging	870	5.6H	WATER	29	33	670	7.5H	AIR	/	/	/			
			UPPER BONNET	2016841Z	RC-0929-092	AISI 4130 75K,Per ASTM A29	1	AP033181	Forging	870	5.0H	WATER	22	25	650	8.0H	AIR	/	/	/			
			LOWER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033189	Forging	870	6.5H	WATER	20	24	660	10.0H	AIR	/	/	/			
			STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033233	Forging	1030	3.5H	WATER	25	28	630	5.2H	AIR	630	5.0H	AIR			
			BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033245	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H	AIR			
	GATE	121V-1193	HC2209019-01	AISI 4110 75K,Per ASTM A276/276M	1	AP033302	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	AIR					
	BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033279 AP033286	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	AIR					
Melt No.	H.T. No.	Chemical Analysis (wt. %)										Physical Properties											
		C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
2023755	HY221002-2	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	QTC	719	548	24.6	63.0	52/67/73	222HBW	JBW-3008/ WDW-300
2016841Z	RC-0929-092	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-3008/ WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



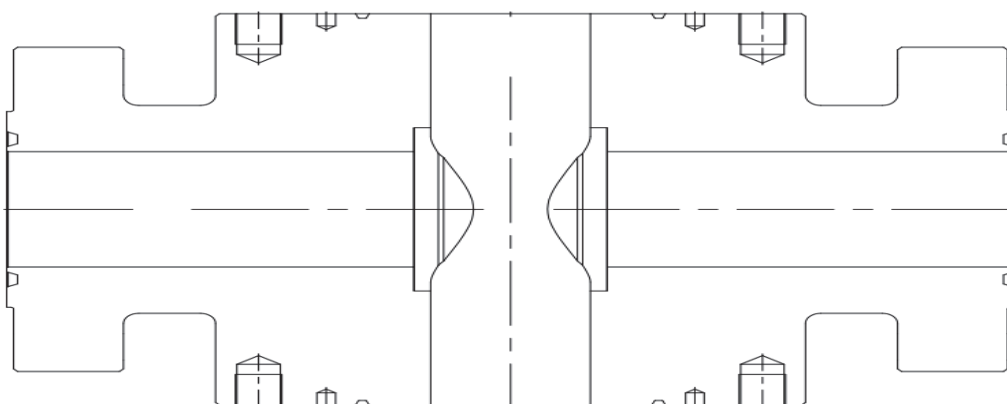
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033164	HY221002-2	222HBW/220HBW 218HBW/212HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



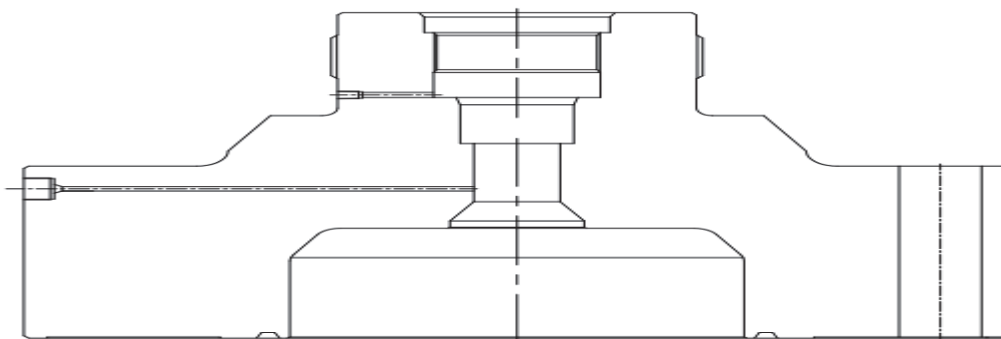
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033181	RC-0929-092	208HBW/209HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



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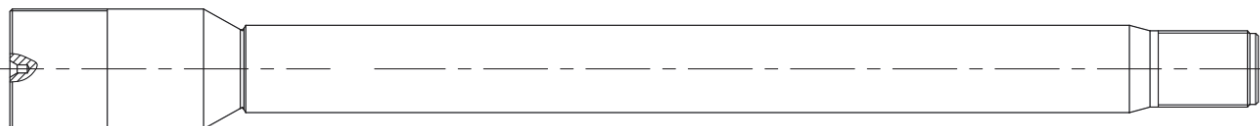
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[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a piston or cylinder head, showing a cross-section with a central bore and a side port. The drawing includes a top view (left) and a side view (right), with dimensions and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



HARDNESS TEST REPORT

10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	WC		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033279	HC2209019-01	1197HV				
2	AP033286	HC2209019-01	1197HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a shaft with a keyway and a pulley hub. The drawing shows a cross-section of the shaft with a keyway. The keyway is defined by a dashed line indicating its depth. The pulley hub is shown on the right side of the shaft. The drawing includes a section line (A-A) and a dimension line indicating the length of the shaft.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1004-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033164	HY221002-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ1.6 FBH Block Φ3.2 FBH Block Φ6.4 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033181	RC-0929-092	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033189	RC-0921-060	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033233	HY221003-3	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033245	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033164	HY221002-2	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033189	RC-0921-060	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033302	HC2209019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033302	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.09			



MAGNETIC PARTICLE INSPECTION REPORT

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LIQUID PENETRATE EXAMINATION

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033279	HC2209019-01	Acceptable					
2	AP033286	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



LIQUID PENETRATE EXAMINATION

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F027		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033164	HY221002-2	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

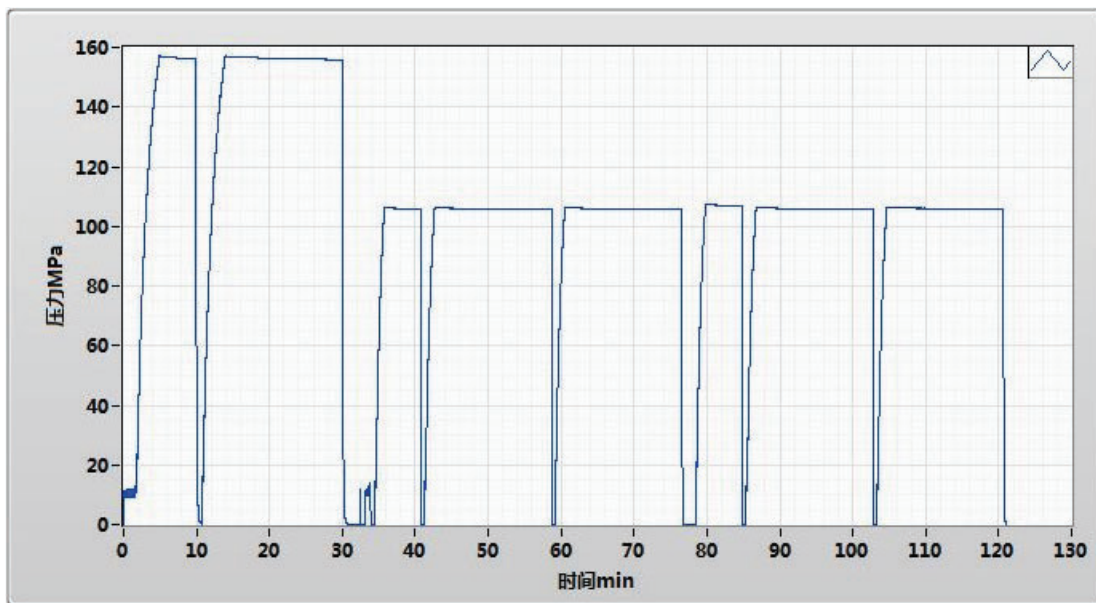
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F027	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.81	156.09	4.0	0.72
2	156.90	155.89	15.0	1.00
3	106.07	105.84	4.0	0.24
4	106.11	105.70	15.0	0.41
5	106.09	105.81	15.0	0.28
6	107.15	106.93	4.0	0.22
7	106.15	105.73	15.0	0.42
8	106.16	105.85	15.0	0.30



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.01



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F028

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



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CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F028

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product	P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications												
		1335	HYDRAULIC GATE VALVE	PFFY105/180-00	AP033F028	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st												
P/N	Parts	Description		Melting Practice			Austenitized			Quenched			Temper(1)		Temper(2)									
		Melt No.	H.T. No.	Material Spec Standards	Q t y	Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)								
PFFY105/180-00	BODY	2023755	HY221006-2	AISI 4130 75K,Per ASTM A29	1	AP0331165	Forging	870	5.5H	WATER	26	670	7.7H	AIR	/	/								
	UPPER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP0331176	Forging	870	6.5H	WATER	20	660	10.0H	AIR	/	/								
	LOWER BONNET	2016841Z	RC-09-54	AISI 4130 75K,Per ASTM A29	1	AP0331193	Forging	860	5.5H	WATER	28	675	8.5H	AIR	/	/								
	STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033240	Forging	1030	3.5H	WATER	25	630	5.2H	AIR	630	AIR								
	BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033252	Forging	1030	3.5H	WATER	26	630	5.0H	AIR	630	AIR								
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033299	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	AIR							
	BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033275 AP033278	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	AIR							
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Physical Properties								
		Spec Origin	Spec Size	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact direction (Transverse)	Hardness	Equipment Type														
2023755	HY221006-2	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	8"x8"x10"	QTC	719	548	24.6	63.0	52/67/73	222HBW	JBW-300B/ WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-300B/ WDW-300
2016841Z	RC-09-54	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	676	565	45.0	49.0	57/55/48	221HBW	JBW-300B/ WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	ø 80x200	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-300B/ WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	ø 80x200	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-300B/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-300B/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-300B/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



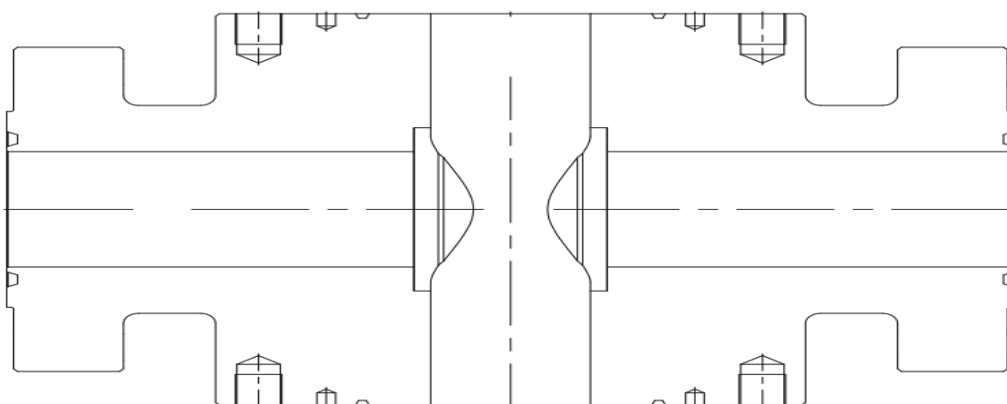
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033165	HY221006-2	222HBW/214HBW 216HBW/207HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



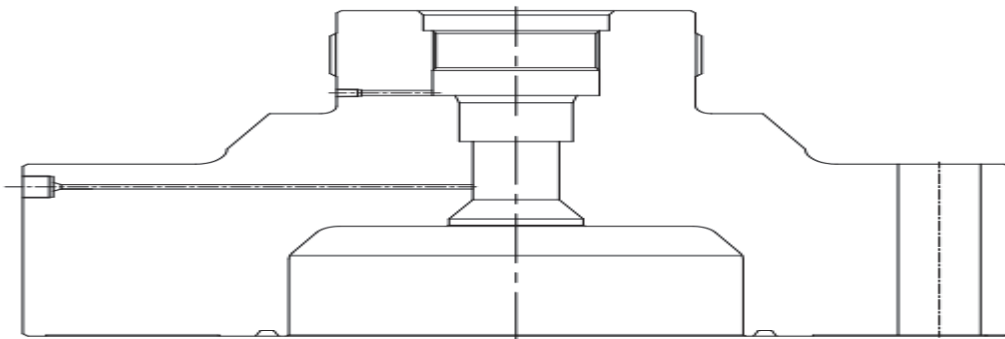
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033176	RC-0921-060	216HBW/218HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



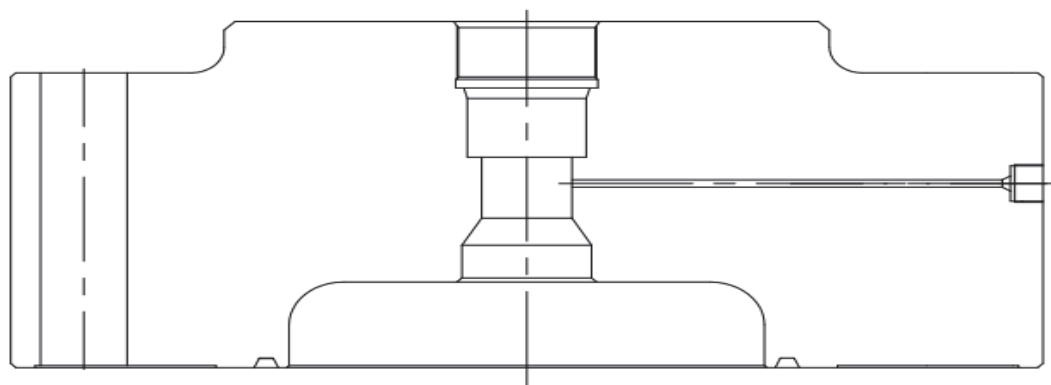
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033193	RC-09-54	215HBW/213HBW					

Sketch:



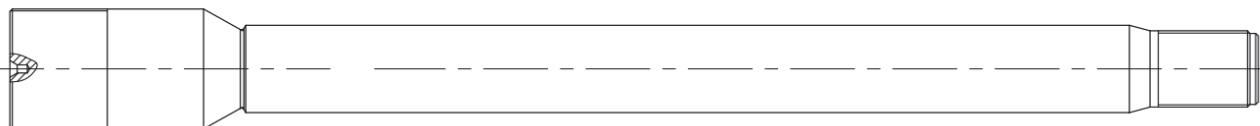
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section. The drawing includes dimension lines and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



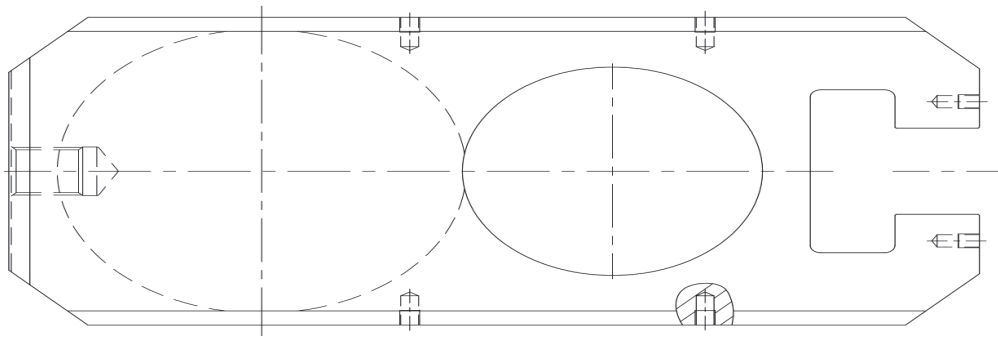
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220930-03
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033299	HC2209019-01	1171HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E18	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	/		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033275	HC2209019-01	96HRB				
2	AP033278	HC2209019-01	99HRB				
Sketch:							
Method Used:							
Acceptable Hardness:		94HRB-99HRB		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	WC		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033275	HC2209019-01	1197HV				
2	AP033278	HC2209019-01	1171HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1008-005	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033165	HY221006-2	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE			Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block			Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st			Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB			Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033176	RC-0921-060	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033193	RC-09-54	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033240	HY221003-3	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033252	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3310Uw/cm ²		
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033165	HY221006-2	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:	Found to be satisfactory								
Inspected by:	Dongkai Xu			Organization:	QC Department				
Approved by:	Xin Zheng			Date:	2022.10				
NDT Level:	MT II								



MAGNETIC PARTICLE INSPECTION REPORT

Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033299	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	NCS-2209-Q58	
Part No.:	X-182590-01	Material:	AISI 410 75K				Coating:	/	
Description:	7-1/16"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:			3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:			≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033275	HC2209019-01	Acceptable						
2	AP033278	HC2209019-01	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033275	HC2209019-01	Acceptable					
2	AP033278	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-1021-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033252	HY220918-2	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu		Organization:		QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II		Date:		2022.10			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F028		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033165	HY221006-2	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

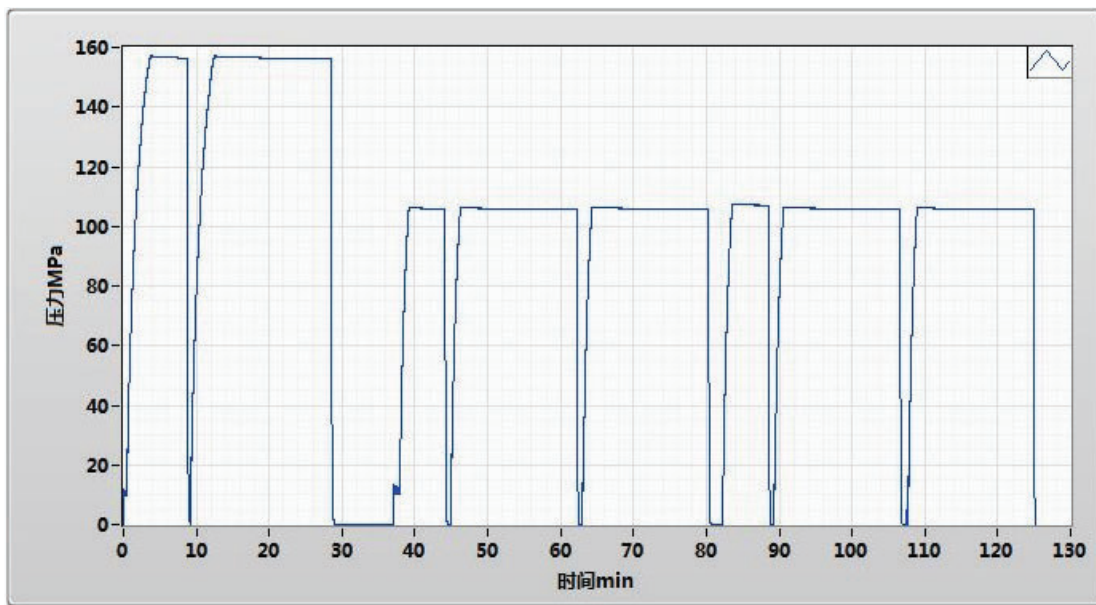
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F028	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.90	156.38	4.0	0.51
2	156.93	156.17	15.0	0.76
3	106.11	105.83	4.0	0.29
4	106.11	105.73	15.0	0.38
5	106.14	105.88	15.0	0.26
6	107.21	107.08	4.0	0.13
7	106.14	105.87	15.0	0.27
8	106.13	105.69	15.0	0.43



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.02



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F029

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F029

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1335	HYDRAULIC GATE VALVE		PFFY105/180-00	AP033F029	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
P/N	Parts	Description		Material Spec Standards	Melting Practice		Q	Austenized		Quenched		Temper(1)		Temper(2)										
		Melt No.	H.T. No.		Serial No.	Finished		Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium						
			BODY	2023755	RC-10-18	AISI 4130 75K,Per ASTM A29	1	AP033169	Forging	865	6.0H	WATER	26	37	680	7.7H	AIR	/	/	/				
			UPPER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033178	Forging	870	6.5H	WATER	20	24	660	10.0H	AIR	/	/	/				
			LOWER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033190	Forging	870	6.5H	WATER	20	24	660	10.0H	AIR	/	/	/				
			STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033234	Forging	1030	3.5H	WATER	25	28	630	5.2H	AIR	630	5.0H	AIR				
			BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033250	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H	AIR				
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033300	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	AIR						
	BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033281 AP033288	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	6.0H	AIR						
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
2023755	RC-10-18	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	8"x8"x10"	QTC	686	558	40.0	57.0	67/59/46	222HBW	JBW-3008/ WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	ø 80x200	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-3008/ WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	ø 80x200	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



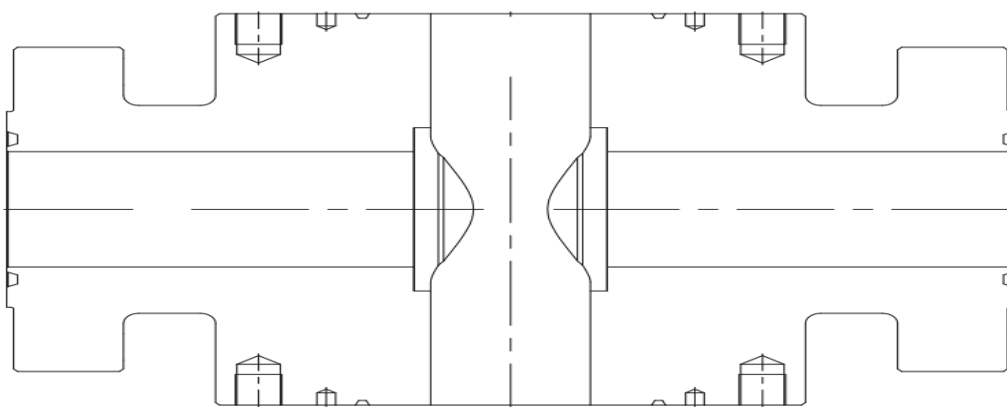
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033169	RC-10-18	215HBW/217HBW 220HBW/209HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



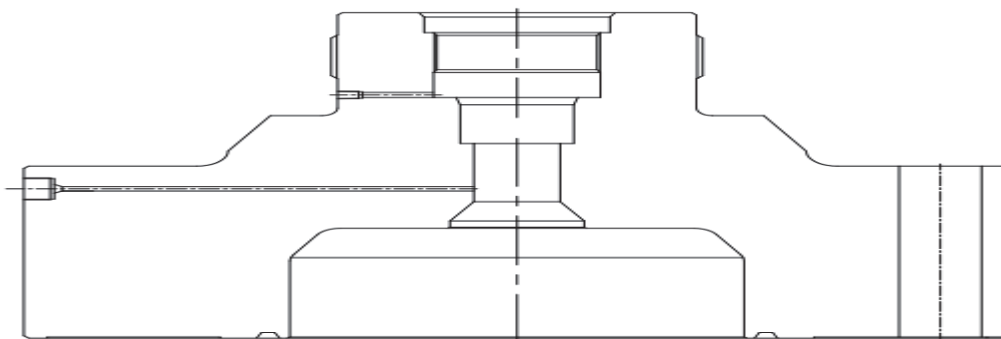
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033178	RC-0921-060	204HBW/202HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



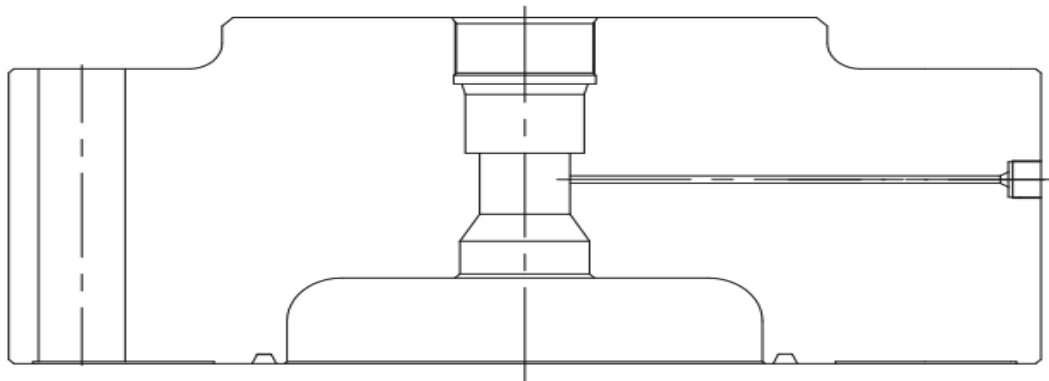
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033190	RC-0921-060	215HBW/211HBW					

Sketch:



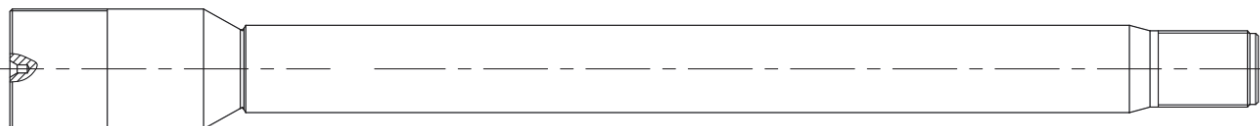
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



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[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



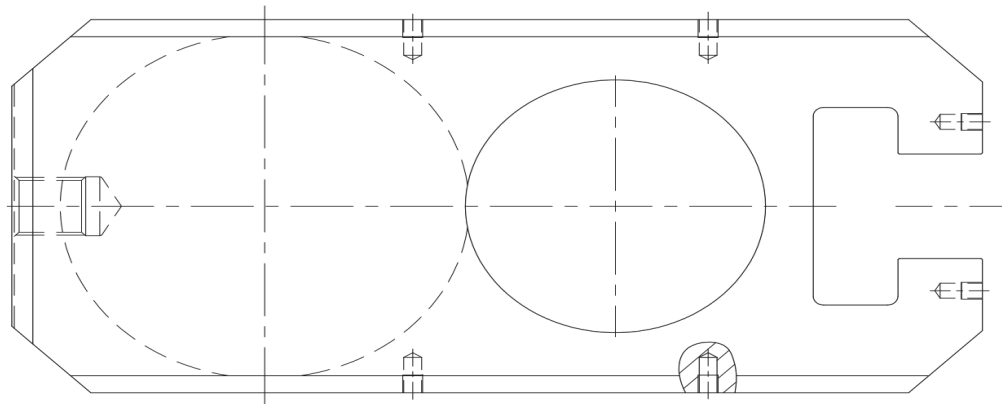
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220930-01
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033300	HC2209019-01	229HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



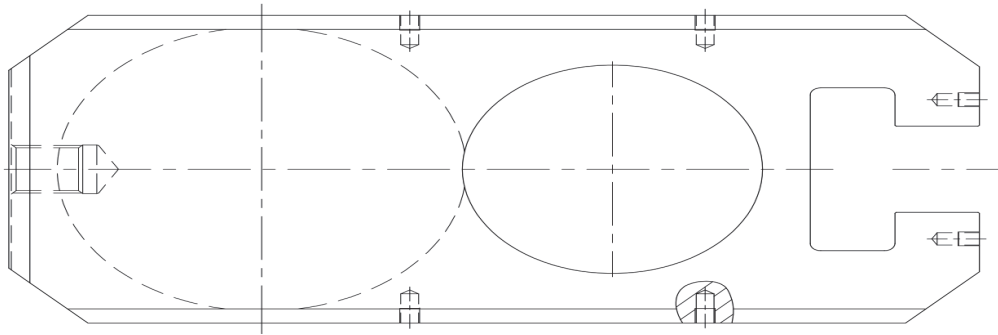
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220930-03
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033300	HC2209019-01	1171HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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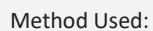
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220930-04
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Body bushing					Quantity:	2
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033281	HC2209019-01	1171HV				
2	AP033288	HC2209019-01	1197HV				
Sketch:							
Method Used:		Impact Energy: 5Kg-f(49.03N).					
Acceptable Hardness:		≥1050HV		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



HARDNESS TEST REPORT

Sketch:

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ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1008-005	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033169	RC-10-18	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE			Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block			Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st			Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB			Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033178	RC-0921-060	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033190	RC-0921-060	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033234	HY221003-3	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033250	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP033169	RC-10-18	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.10		



MAGNETIC PARTICLE INSPECTION REPORT

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MAGNETIC PARTICLE INSPECTION REPORT

Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.



LIQUID PENETRATE EXAMINATION

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geqslant 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033300	HC2209019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:	Found to be satisfactory							
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033300	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q58
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	/
Description:	7-1/16"15000psi Body Bushing					Quantity:	2
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033281	HC2209019-01	Acceptable				
2	AP033288	HC2209019-01	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:		Found to be satisfactory					
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033281	HC2209019-01	Acceptable					
2	AP033288	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	PTP-1021-001	
Part No.:	X-182591-01	Material:	PH17-4-105K				Coating:	/	
Description:	7-1/16"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033250	HY220918-2	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu		Organization:		QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II		Date:		2022.10			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F029		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033169	RC-10-18	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

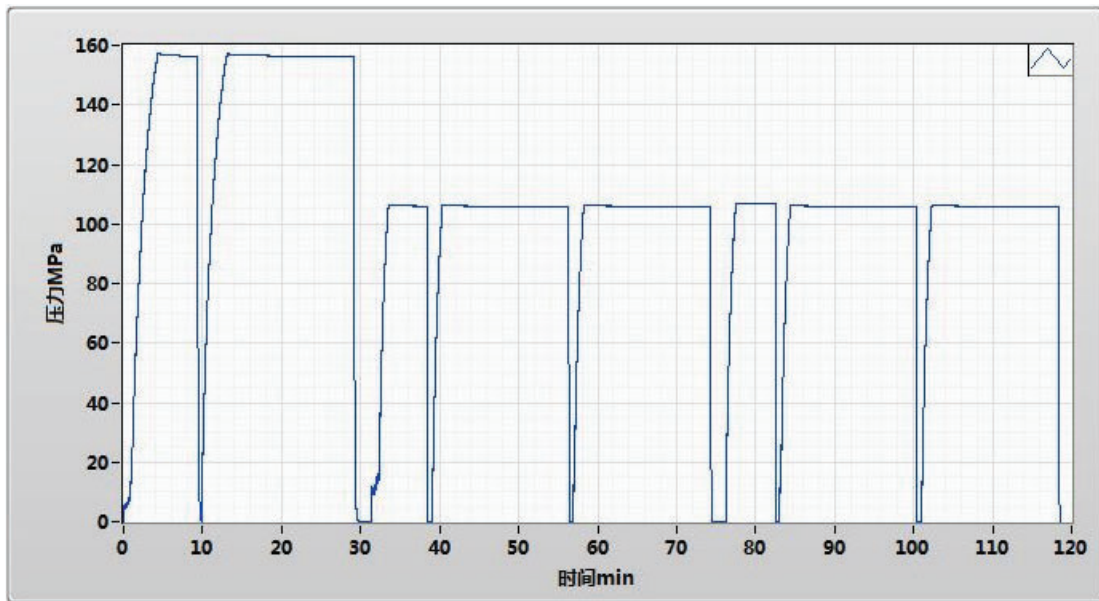
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F029	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.85	156.22	4.0	0.64
2	156.92	156.03	15.0	0.89
3	106.16	105.96	4.0	0.20
4	106.14	105.76	15.0	0.38
5	106.13	105.81	15.0	0.32
6	106.95	106.71	4.0	0.23
7	106.11	105.67	15.0	0.44
8	106.14	105.80	15.0	0.34



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.01



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F030

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F030

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications											
		1335	HYDRAULIC GATE VALVE		PFFY105/180-00	AP033F030	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st											
P/N	Parts	Description		Melting Practice			Quenched			Temper(1)			Temper(2)											
		Melt No.	H.T. No.	Material Spec Standards	Q t y	Serial No.	Finished	Austenized Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium									
PFFY105/180-00	BODY	2023755	HY221006-2	AISI 4130 75K,Per ASTM A29	1	AP033167	Forging	870	5.5H	WATER	26	670	7.7H	AIR	/	/								
	UPPER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033174	Forging	870	6.5H	WATER	20	660	10.0H	AIR	/	/								
	LOWER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033188	Forging	870	6.5H	WATER	20	660	10.0H	AIR	/	/								
	STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033237	Forging	1030	3.5H	WATER	25	630	5.2H	AIR	630	AIR								
	BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033255	Forging	1030	3.5H	WATER	26	630	5.0H	AIR	630	AIR								
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033295	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	AIR							
BODY BUSHING		121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033280 AP033285	Forging	960	3.0H	OIL	39	51	720	6.0H	AIR	680	AIR							
Chemical Analysis (wt. %)																								
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact direction (Transverse)	Hardness	Equipment Type
2023755	HY221006-2	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	8"x8"x10"	QTC	719	548	24.6	63.0	52/67/73	222HBW	JBW-3008/ WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	8"x8"x10"	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	ø 80x200	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-3008/ WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	ø 80x200	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	100x100x200	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



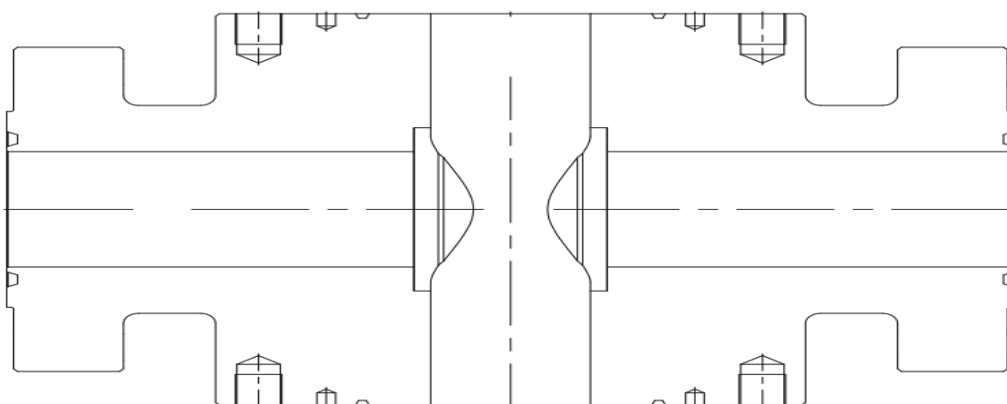
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033167	HY221006-2	216HBW/212HBW 218HBW/217HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



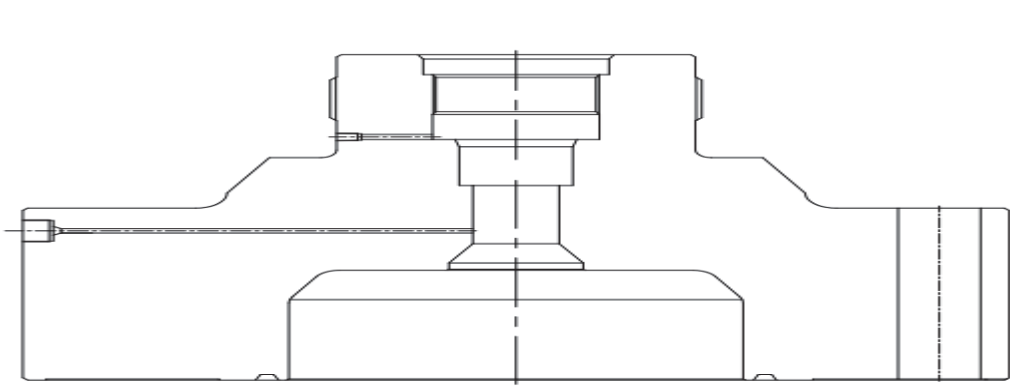
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033174	RC-0921-060	212HBW/214HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



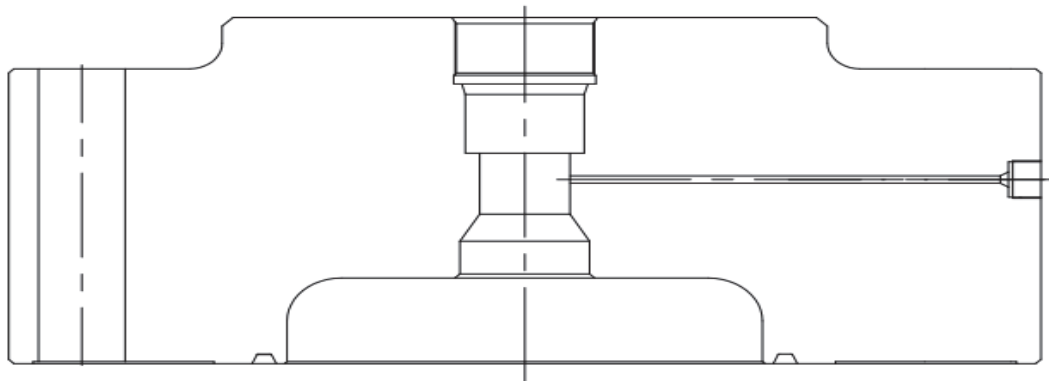
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033188	RC-0921-060	211HBW/212HBW					

Sketch:



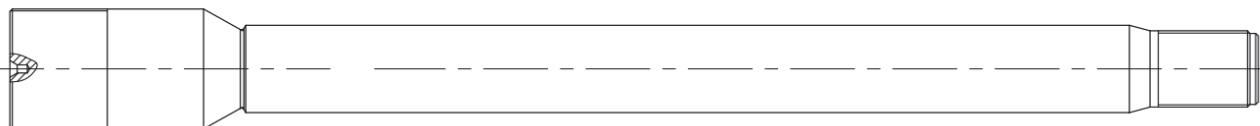
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a piston or cylinder head, showing a cross-section with a central bore and a side port. The drawing includes a top view (left) and a side view (right), with dimensions and a scale bar.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E18	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	/		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033280	HC2209019-01	95HRB				
2	AP033285	HC2209019-01	96HRB				
Sketch:							
Method Used:							
Acceptable Hardness:		94HRB-99HRB		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	WC		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033280	HC2209019-01	1197HV				
2	AP033285	HC2209019-01	1171HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						

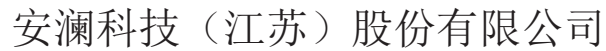


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[illegible]

Technical drawing of a shaft with a keyway and a pulley hub. The drawing shows a side view of the shaft with a keyway. A dashed line indicates the center of the shaft. The pulley hub is shown on the right side of the shaft. The drawing includes dimensions and a section line.

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



ULTRASONIC EXAMINATION REPORT

ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033174	RC-0921-060	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033188	RC-0921-060	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033237	HY221003-3	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033255	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033167	HY221006-2	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1027-001	
Part No.:	X-182585-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
1	AP033174	RC-0921-060	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033188	RC-0921-060	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



LIQUID PENETRATE EXAMINATION

21



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033295	HC2209019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



LIQUID PENETRATE EXAMINATION

23



MAGNETIC PARTICLE INSPECTION REPORT

24

LIQUID PENETRATE EXAMINATION

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033280	HC2209019-01	Acceptable					
2	AP033285	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



LIQUID PENETRATE EXAMINATION

Inspection Coverage:

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F030		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033167	HY221006-2	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

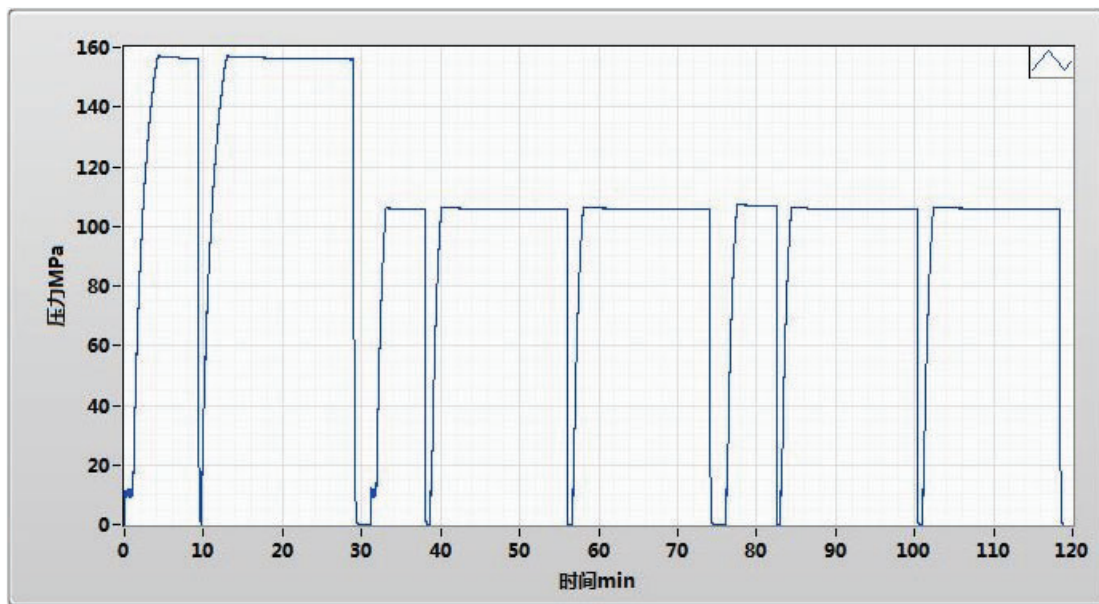
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F030	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.85	156.17	4.0	0.68
2	156.90	155.96	15.0	0.94
3	105.98	105.80	4.0	0.18
4	106.12	105.72	15.0	0.40
5	106.12	105.79	15.0	0.33
6	107.12	106.87	4.0	0.25
7	106.11	105.64	15.0	0.46
8	106.14	105.80	15.0	0.34



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.01



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F031

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



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CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F031

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer	PO No.	Product	P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications												
	1335	HYDRAULIC GATE VALVE	PFFY105/180-00	AP033F031	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st												
P/N	Parts	Description		Heat Treatment										Temper(2)									
		Melt No.	H.T. No.	Material Spec Standards	Melting Practice		Austenized		Quenched		Temper(1)		Temp (°C)	Time (min)	Medium								
					Serial No.	Finished	Temp (°C)	Time (min)	Start Temp	Finish Temp	Temp (°C)	Time (min)				Medium							
	BODY	2023755	HY221006-2	AISI 4130 75K,Per ASTM A29	1	AP033166	Forging	870	5.5H	26	29	670	7.7H	AIR	/	/							
	UPPER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033173	Forging	870	6.5H	20	24	660	10.0H	AIR	/	/							
	LOWER BONNET	2016841Z	RC-09-54	AISI 4130 75K,Per ASTM A29	1	AP033195	Forging	860	5.5H	28	39	675	8.5H	AIR	/	/							
PFFY105/180-00	STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033235	Forging	1030	3.5H	25	28	630	5.2H	AIR	630	5.0H	AIR						
	BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033248	Forging	1030	3.5H	26	29	630	5.0H	AIR	630	5.0H	AIR						
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033303	Forging	960	3.0H	39	51	720	6.0H	AIR	680	6.0H	AIR						
	BODY BUSHING	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033276 AP033283	Forging	960	3.0H	39	51	720	6.0H	AIR	680	6.0H	AIR						
Melt No.	H.T. No.	Chemical Analysis (wt. %)										Physical Properties				Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type					
		C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe				Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)
2023755	HY221006-2	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	QTC	719	548	24.6	63.0	52/67/73	222HBW	JBW-3008/ WDW-300
	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	700	535	31.0	66.0	32/41/59	230HBW	JBW-3008/ WDW-300
	RC-09-54	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	676	565	45.0	49.0	57/55/48	221HBW	JBW-3008/ WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	QTC	1072	955	19.7	60.4	49/42/31	32HRC	JBW-3008/ WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	QTC	1084	964	21.3	60.7	35/41/46	30HRC	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	700	590	23.0	67.0	/	224HBW	JBW-3008/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



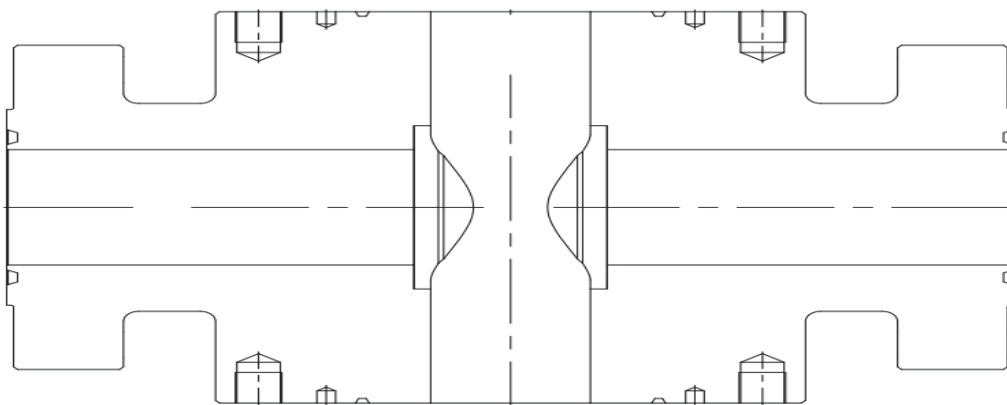
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033166	HY221006-2	219HBW/215HBW 212HBW/222HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



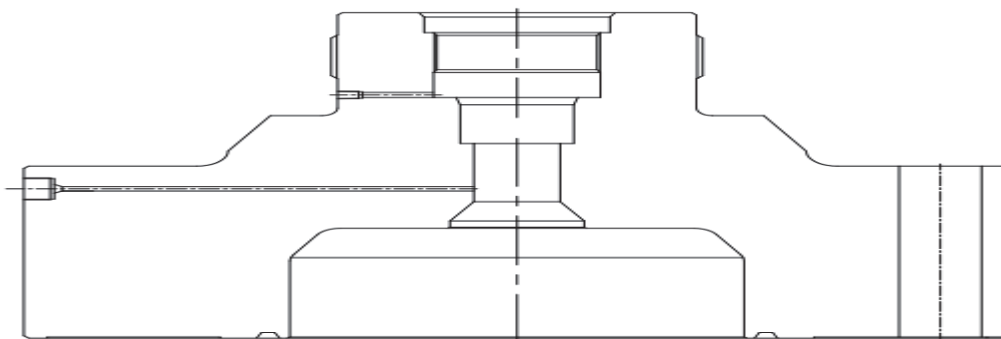
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033173	RC-0921-060	214HBW/219HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



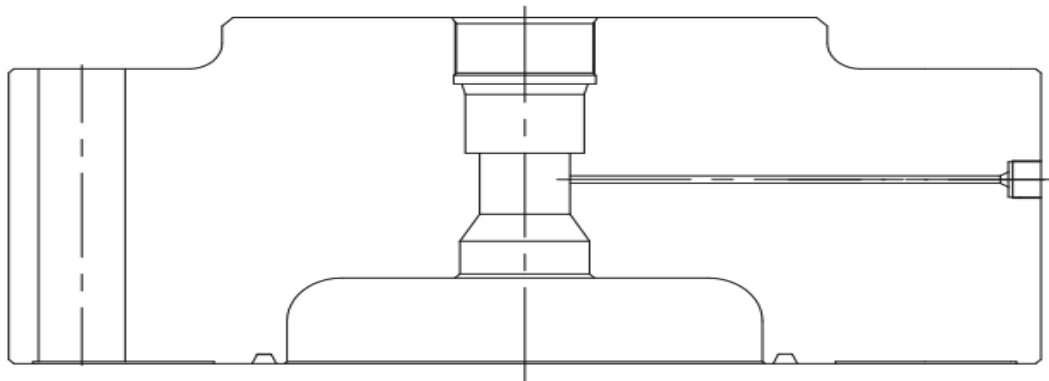
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033195	RC-09-54	211HBW/209HBW					

Sketch:



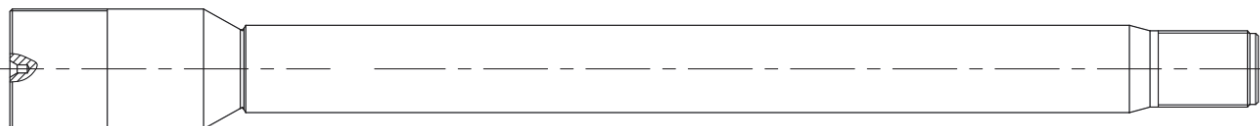
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

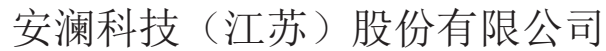
Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or housing, showing a cross-section. The drawing includes a central hole, a dashed circle indicating a hidden feature, and various mounting points or fasteners. The part has a complex, elongated shape with a central circular feature and a dashed circle indicating a hidden feature. The drawing is a technical sketch with dimensions and labels.

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[illegible]



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E18	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	/		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033276	HC2209019-01	96HRB				
2	AP033283	HC2209019-01	98HRB				
Sketch:							
Method Used:							
Acceptable Hardness:	94HRB-99HRB		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



HARDNESS TEST REPORT

11



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022
Drawing #:	PFFY105/180 -00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1008-005
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033166	HY221006-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033173	RC-0921-060	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033195	RC-09-54	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K			Coating:	/	
Description:	7-1/16"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033235	HY221003-3	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033248	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP033166	HY221006-2	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.10		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1027-001	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033173	RC-0921-060	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033195	RC-09-54	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	NCS-2209-Q57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	/	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033303	HC2209019-01	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:	QC Department			
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033303	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033276	HC2209019-01	Acceptable					
2	AP033283	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



LIQUID PENETRATE EXAMINATION

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F031		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033166	HY221006-2	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



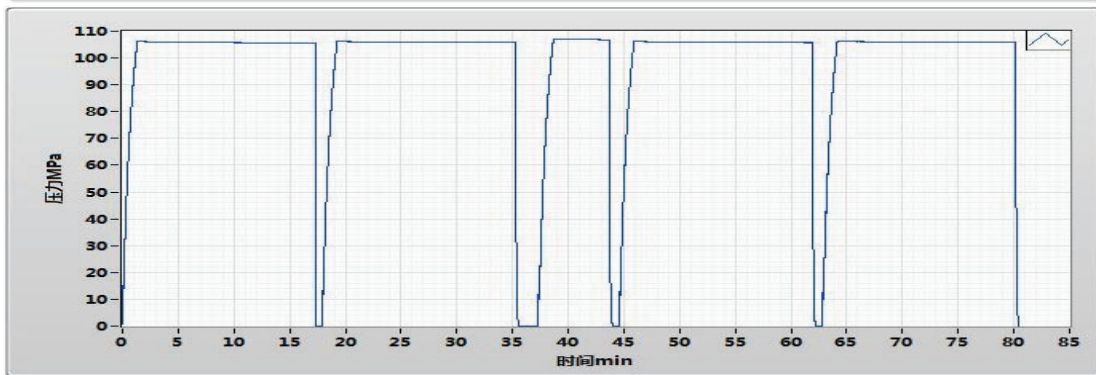
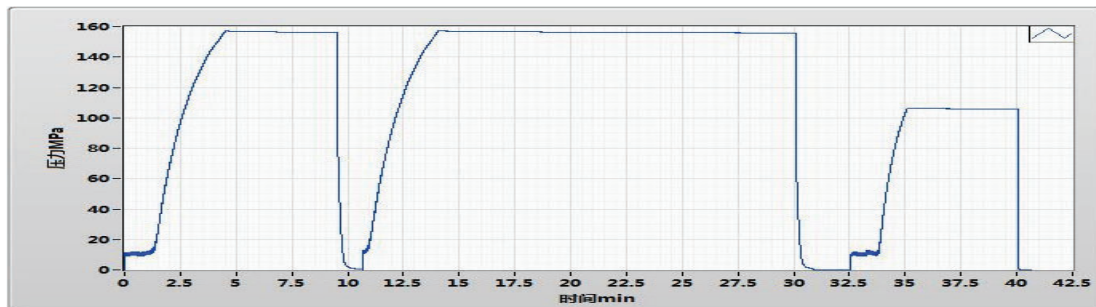
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F031	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.79	156.10	4.0	0.69
2	156.93	155.87	15.0	1.06
3	106.11	105.85	4.0	0.26
4	106.09	105.61	15.0	0.48
5	106.14	105.81	15.0	0.33
6	107.03	106.82	4.0	0.21
7	106.13	105.75	15.0	0.38
8	106.17	105.90	15.0	0.27



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.02



REPORT INDEX

Purchase Order: 1335

Quantity: 1EA

Shipment No.: Crate# AP033F032

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-12
4	Ultrasonic Testing	Page - 13-17
5	Magnetic Particle Inspection Report	Page - 18-26
6	Hydrostatic Test	Page - 27-28



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1335, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1335

SERIAL NO.: AP033F032

PART NO.: PFFY105/180-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1335



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications										
		1335	HYDRAULIC GATE VALVE		PFFY105/180-00	AP033F032	1	7-1/16"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st										
P/N	Parts	Description		Material Spec Standards	Melting Practice		Austenitized		Quenched		Heat Treatment		Temper(2)										
		Melt No.	H.T. No.		Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium							
PFFY105/180-00	BODY	2023755	HY221002-2	AISI 4130 75K,Per ASTM A29	1	AP033162	Forging	870	5.6H	WATER	29	33	670	AIR	/	/							
	UPPER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033175	Forging	870	6.5H	WATER	20	24	660	AIR	/	/							
	LOWER BONNET	2016841Z	RC-0921-060	AISI 4130 75K,Per ASTM A29	1	AP033185	Forging	870	6.5H	WATER	20	24	660	AIR	/	/							
	STEM	YX2208-2018	HY221003-3	PH17-4 105K,Per ASTM A564/564M	1	AP033236	Forging	1030	3.5H	WATER	25	28	630	AIR	5.0H	AIR							
	BALANCE STEM	YX2206-2314	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033254	Forging	1030	3.5H	WATER	26	29	630	AIR	5.0H	AIR							
	GATE	121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	1	AP033293	Forging	960	3.0H	OIL	39	51	720	AIR	6.0H	AIR							
BODY BUSHING		121V-1193	HC2209019-01	AISI 410 75K,Per ASTM A276/276M	2	AP033289	Forging	960	3.0H	OIL	39	51	720	AIR	6.0H	AIR							
Chemical Analysis (wt. %)																							
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origin	Yield (MPa)	Tensile (MPa)	Elongatio n (%)	ROA (%)	Impact direction (Transverse)	Hardness	Equipment Type
2023755	HY221002-2	0.31	0.57	0.29	0.016	0.0078	0.98	0.01	0.188	0.006	/	/	0.01	/	/	QTC	548	719	24.6	63.0	52/67/73	222HBW	JBW-3008/WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	535	700	31.0	66.0	32/41/59	230HBW	JBW-3008/WDW-300
2016841Z	RC-0921-060	0.29	0.53	0.25	0.009	0.009	1.06	0.04	0.16	0.008	/	/	0.03	/	/	QTC	535	700	31.0	66.0	32/41/59	230HBW	JBW-3008/WDW-300
YX2208-2018	HY221003-3	0.028	0.55	0.39	0.032	0.003	15.64	4.13	/	/	/	/	3.64	0.243	/	QTC	955	1072	19.7	60.4	49/42/31	32HRC	JBW-3008/WDW-300
YX2206-2314	HY220918-2	0.022	0.56	0.46	0.030	0.002	15.60	4.06	/	/	/	/	3.60	0.242	/	QTC	964	1084	21.3	60.7	35/41/46	30HRC	JBW-3008/WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	590	700	23.0	67.0	/	224HBW	JBW-3008/WDW-300
121V-1193	HC2209019-01	0.12	0.38	0.54	0.022	0.002	11.8	0.15	/	/	/	/	/	/	/	QTC	590	700	23.0	67.0	/	224HBW	JBW-3008/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

-----Xin Zheng-----
NAME of QA Manager, for and on the authority of COMPANY NAME



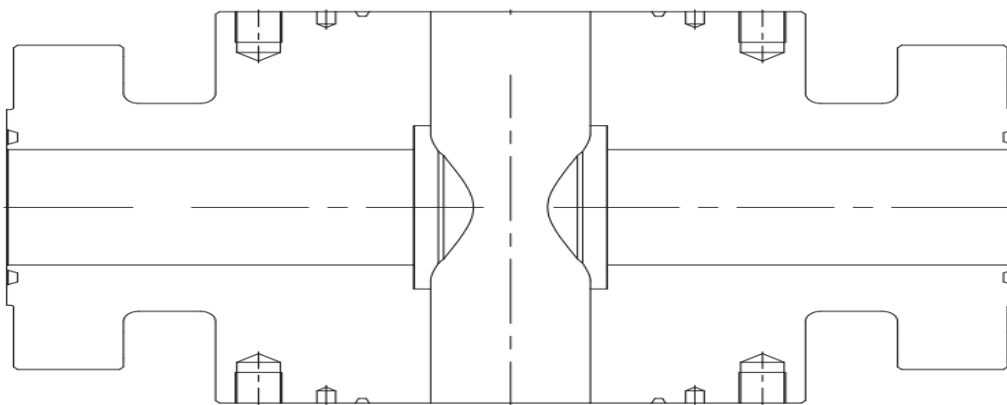
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1024-004
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/
Description:	7-1/16"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033162	HY221002-2	212HBW/217HBW 222HBW/224HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



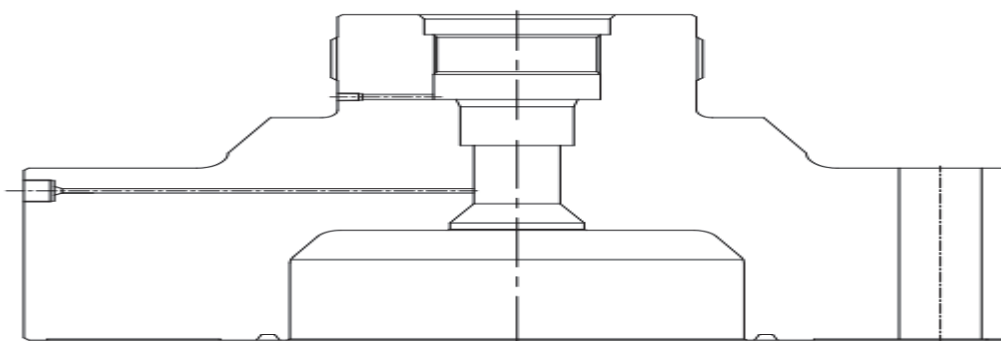
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1027-004	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033175	RC-0921-060	212HBW/214HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



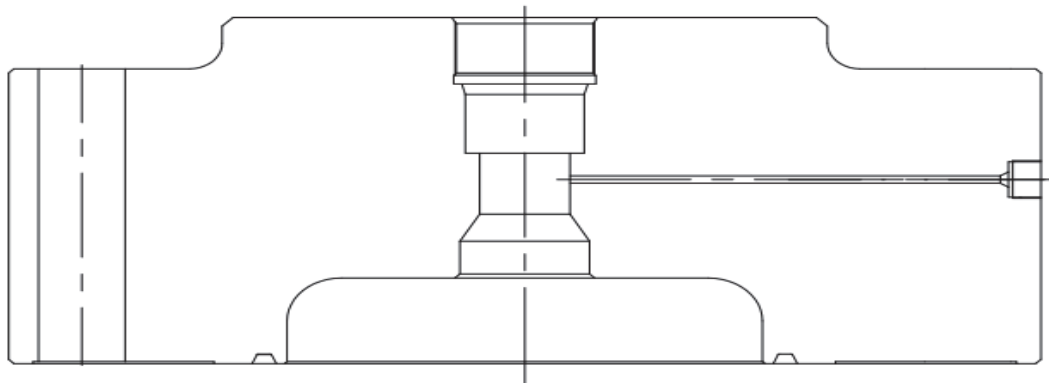
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1026-003	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033185	RC-0921-060	203HBW/207HBW					

Sketch:



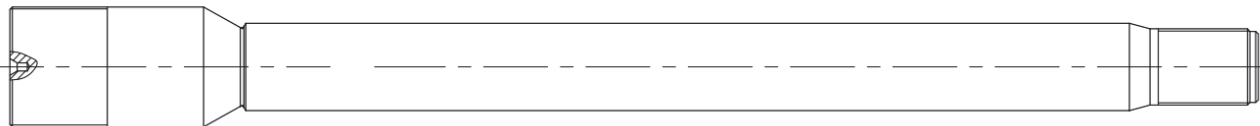
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:

Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

[] Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Technical drawing of a mechanical part, likely a shaft or pulley, showing a cross-section with a central hole, a dashed circle indicating a hidden feature, and various dimensions and tolerances.

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E18	API Monogram:	6A-2074		
Part No.:	X-182590-01	Material:	AISI 410 75K	Coating:	/		
Description:	7-1/16"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033274	HC2209019-01	98HRB				
2	AP033289	HC2209019-01	97HRB				
Sketch:							
Method Used:							
Acceptable Hardness:		94HRB-99HRB		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



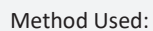
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220930-04
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC
Description:	7-1/16"15000psi Body bushing					Quantity:	2
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033274	HC2209019-01	1171HV				
2	AP033289	HC2209019-01	1171HV				
Sketch:							
Method Used:		Impact Energy: 5Kg-f(49.03N).					
Acceptable Hardness:		≥1050HV		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



HARDNESS TEST REPORT

Sketch:

12





安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033175	RC-0921-060	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1005-004	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi Lower Bonnet						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033185	RC-0921-060	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1017-004	
Part No.:	X-182716-01	Material:	PH17-4 105K				Coating:	/	
Description:	7-1/16"15000psi Stem						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033236	HY221003-3	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1010-003
Part No.:	X-182591-01	Material:	PH17-4 105K			Coating:	/
Description:	7-1/16"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033254	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1024-002	
Part No.:	X-182734-01	Material:	AISI 4130 75K				Coating:	/	
Description:	7-1/16"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP033162	HY221002-2	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1027-001	
Part No.:	X-182585-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Upper Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033175	RC-0921-060	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1026-001	
Part No.:	X-182586-01	Material:	AISI 4130 75K			Coating:	/	
Description:	7-1/16"15000psi Lower Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033185	RC-0921-060	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H57	
Part No.:	X-182589-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033293	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	NCS-2209-H58	
Part No.:	X-182590-01	Material:	AISI 410 75K			Coating:	WC	
Description:	7-1/16"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033274	HC2209019-01	Acceptable					
2	AP033289	HC2209019-01	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



LIQUID PENETRATE EXAMINATION

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安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1335		Date:	November, 2022	
Drawing #:	PFFY105/180-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F032		
Part No.:	X-182734-01	Material:	AISI 4130 75K			Coating:	/		
Description:	7-1/16"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033162	HY221002-2	OK	OK					

Drift Test:

Diameter ϕ 179.7 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



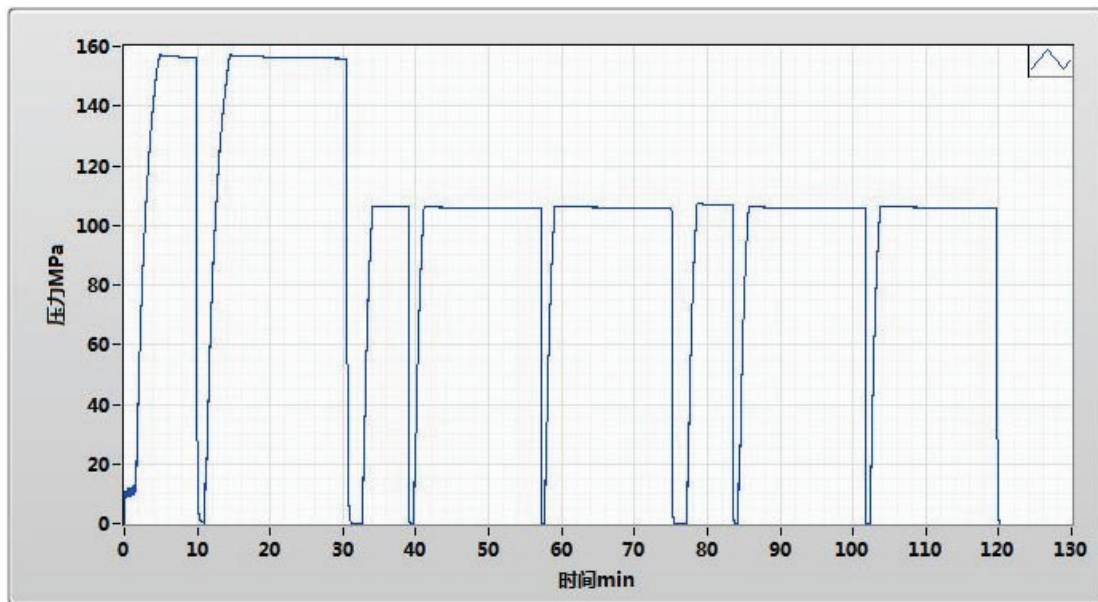
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F032	7-1/16" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.84	156.19	4.0	0.65
2	156.92	155.93	15.0	0.98
3	106.17	106.06	4.0	0.11
4	106.11	105.82	15.0	0.29
5	106.18	105.90	15.0	0.28
6	107.09	106.85	4.0	0.25
7	106.11	105.65	15.0	0.46
8	106.17	105.84	15.0	0.33



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.02



REPORT INDEX

Purchase Order: 1336

Quantity: 1EA

Shipment No.: Crate# AP033F033

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-11
4	Ultrasonic Testing	Page - 12-15
5	Magnetic Particle Inspection Report	Page - 16-23
6	Hydrostatic Test	Page - 24-25



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1336, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1336

SERIAL NO.: AP033F033

PART NO.: PFFY105/130AL-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1336



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No. 1336	Product HYDRAULIC GATE VALVE		P/N PFFY105/130AL-00	Serial No. AP033F033	Qty 1	Size 5-1/8"	WP (psi) 15000Psi	Material EE-0.5	PSL PSL3	Temp LU	Specifications API Spec 6A 21st											
P/N	Parts	Description		Material Spec Standards	Melting Practice		Austenized			Quenched		Heat Treatment			Temper(1)		Temper(2)							
		Melt No.	H.T. No.		Q t y	Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Hardness	Equipment Type					
		C	Mn		Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Size	Spec Origi n	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness
TX21-01970	RC-10-01	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	670	569	43.0	47.0	55/58/46	220HBW	JBW-300B/ WDW-300
TX21-01970	RS-9-072	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x8"x10"	QTC	691	538	28.0	70.0	75/80/78	229HBW	JBW-300B/ WDW-300
YX2208-2019	HY220918-2	0.026	0.47	0.40	0.027	0.002	15.60	4.15	/	/	/	/	3.64	0.244	/	ø 80x200	QTC	1075	942	20.0	61.6	44/39/40	32HRC	JBW-300B/ WDW-300
YX2206-1508	HY220918-2	0.025	0.52	0.35	0.028	0.001	15.75	4.12	/	/	/	/	3.63	0.231	/	ø 80x200	QTC	1073	949	20.7	61.3	43/47/38	31HRC	JBW-300B/ WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	200x100x100	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/ WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	200x100x100	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



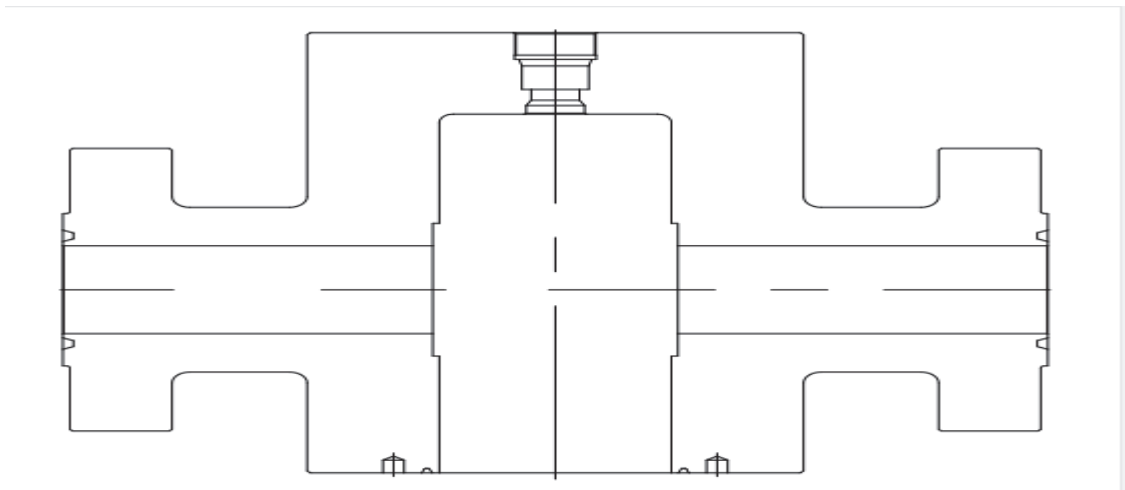
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1108-00 2
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi	Body				Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033310	RC-10-01	217HBW/214HBW 218HBW/221HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



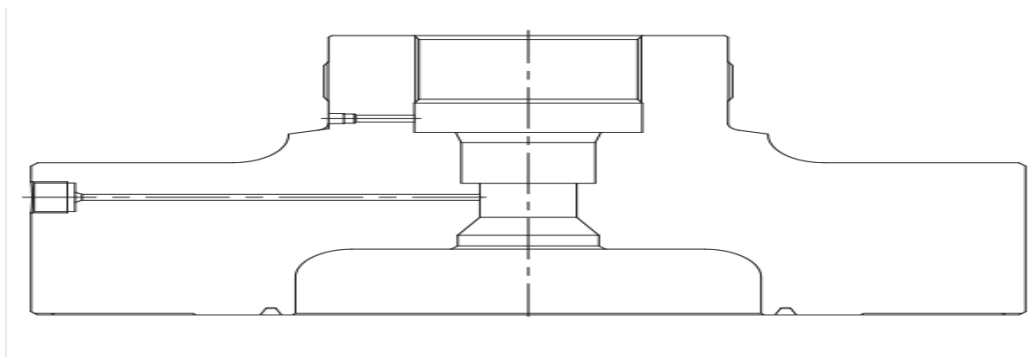
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1010-001	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033332	RS-9-072	211HBW/212HBW					

Sketch:



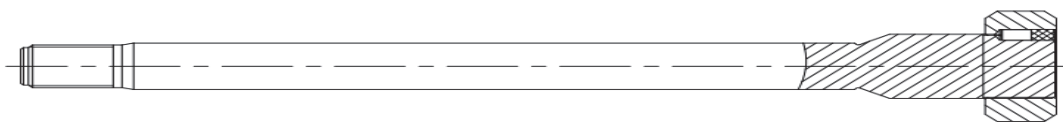
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



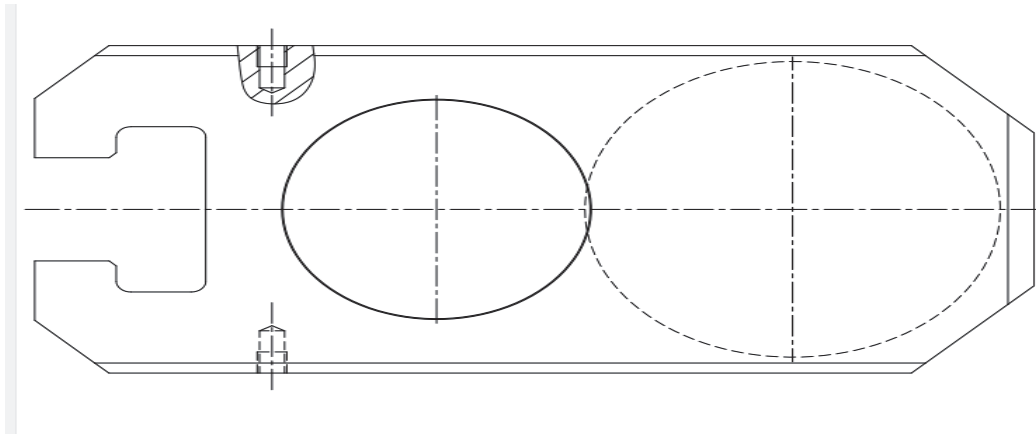
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220925-01
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	/
Description:	5-1/8"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033427	22091002Q1	226HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



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[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-111077-01	Material:	AISI 410 75K	Coating:	WC		
Description:	5-1/8"15000psi Body bushing				Quantity:	2	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033448	22091002Q1	1250HV				
2	AP033446	22091002Q1	1286HV				
Sketch:							
Method Used:		Impact Energy: 5Kg-f(49.03N).					
Acceptable Hardness:		≥1050HV		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT							
Customer:			Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:	
Part No.:		Material:				Coating:	
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033406	HY220918-2	30HRC				
Sketch:							
Method Used:							
Acceptable Hardness:		27HRC-33HRC		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074		Report #:	UTP-1003-005	
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi Body					Quantity:	1		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033310	RC-10-01	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033332	RS-9-072	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1007-00 3	
Part No.:	X-275071-01	Material:	PH17-4 105K			Coating:	/	
Description:	5-1/8"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033387	HY220918-2	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130AL -00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1014-00 4
Part No.:	X-111144-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033406	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1010-002	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033332	RS-9-072	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	H220925-06	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	/	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geqslant 1000Uw/cm^2$	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033427	22091002Q1	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:	Found to be satisfactory							
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-06H	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033427	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	H220925-04	
Part No.:	X-111077-01	Material:	AISI 410 75K				Coating:	/	
Description:	5-1/8"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:			3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:			≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033448	22091002Q1	Acceptable						
2	AP033446	22091002Q1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	H220925-04H	
Part No.:	X-111077-01	Material:	AISI 410 75K				Coating:	WC	
Description:	5-1/8"15000psi Body Bushing						Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033448	22091002Q1	Acceptable						
2	AP033446	22091002Q1	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



LIQUID PENETRATE EXAMINATION

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安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F033		
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033310	RC-10-01	OK	OK					

Drift Test:

Diameter ϕ 102.46 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

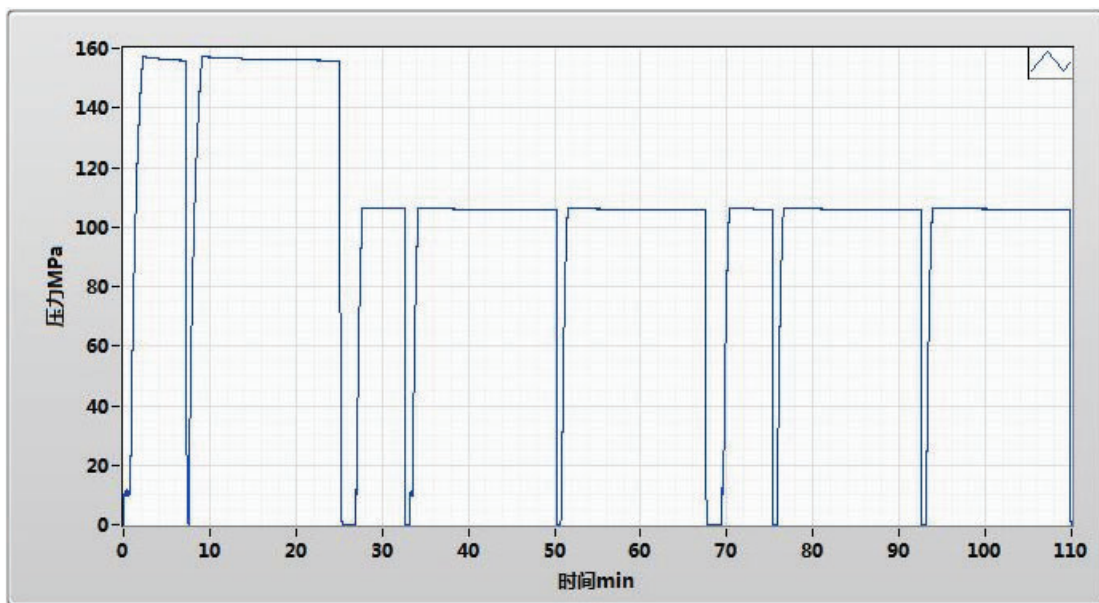
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F033	5-1/8" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.78	155.87	4.0	0.91
2	157.01	155.88	15.0	1.12
3	106.37	106.22	4.0	0.15
4	106.27	105.72	15.0	0.56
5	106.19	105.77	15.0	0.41
6	106.19	105.89	4.0	0.30
7	106.26	105.76	15.0	0.50
8	106.27	105.87	15.0	0.41



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.09



REPORT INDEX

Purchase Order: 1336

Quantity: 1EA

Shipment No.: Crate# AP033F034

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page - 3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-11
4	Ultrasonic Testing	Page - 12-15
5	Magnetic Particle Inspection Report	Page - 16-23
6	Hydrostatic Test	Page - 24-25



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1336, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1336

SERIAL NO.: AP033F034

PART NO.: PFFY105/130AL-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1336



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Description		Product			P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications							
		1336			HYDRAULIC GATE VALVE			PFFY105/130AL-00	AP033F034	1	5-1/8"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st							
P/N	Parts	Melt No.	H.T. No.	Melting Practice			Austenized		Quenched		Temper(1)			Temper(2)									
				Material Spec Standards	Q	Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)						
PFFY105/130A L-00	BODY	TX21-01970	RC-1010-020	AISI 4130 75K,Per ASTM A29	1	AP033307	Forging	870	4.0H	WATER	20	24	670	5.5H	AIR	/	/						
	BONNET	TX21-01970	RS-9-072	AISI 4130 75K,Per ASTM A29	1	AP033333	Forging	860	5.0H	WATER	33	35	700	5.0H	AIR	/	/						
	STEM	YX2208-2019	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033391	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	BALANCE STEM	YX2206-1508	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033409	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	GATE	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	1	AP033426	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H						
BODY BUSHING	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	2	AP033454	AP033488	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H						
Chemical Analysis (wt. %)																							
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongation (%)	ROA (%)	Impact (-46°C) Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	RC-1010-020	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	705	530	31.0	62.0	32/41/59	230HBW	JBW-300B/WDW-300
TX21-01970	RS-9-072	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	691	538	28.0	70.0	75/80/78	229HBW	JBW-300B/WDW-300
YX2208-2019	HY220918-2	0.026	0.47	0.40	0.027	0.002	15.60	4.15	/	/	/	/	3.64	0.244	/	QTC	1075	942	20.0	61.6	44/39/40	32HRC	JBW-300B/WDW-300
YX2206-1508	HY220918-2	0.025	0.52	0.35	0.028	0.001	15.75	4.12	/	/	/	/	3.63	0.231	/	QTC	1073	949	20.7	61.3	43/47/38	31HRC	JBW-300B/WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



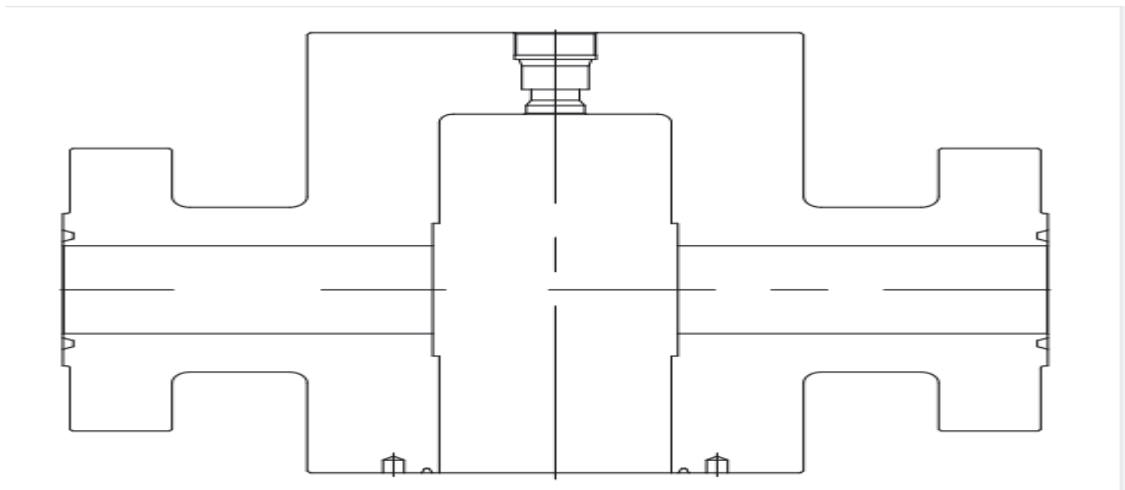
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1108-00 2
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033307	RC-1010-020	213HBW/217HBW 221HBW/222HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



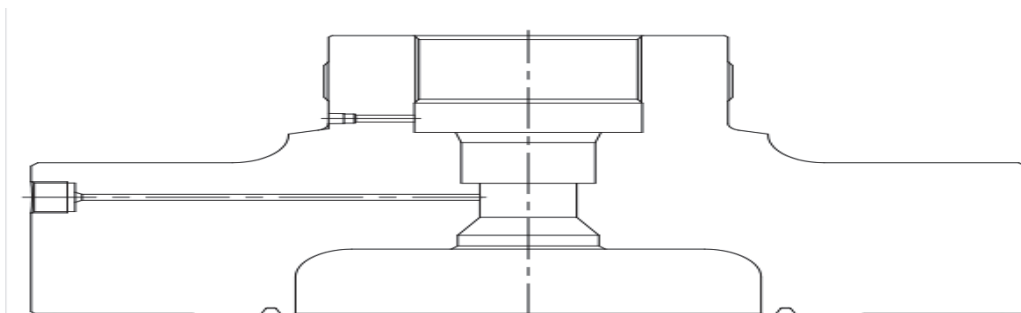
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1010-001	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033333	RS-9-072	209HBW/211HBW					

Sketch:

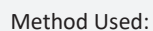


Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



HARDNESS TEST REPORT

Sketch:



Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

☐ Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

The image displays a technical drawing of a mechanical component, likely a shaft or a housing, showing both front and top views. The front view (top) features a central circular feature with a vertical centerline and a horizontal centerline. The top view (bottom) shows a rectangular shape with rounded corners and a central circular feature, also with a vertical centerline and a horizontal centerline. The drawing includes various construction lines, such as dashed lines for hidden features and solid lines for visible edges. The overall shape is symmetrical about both the horizontal and vertical centerlines.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[☒] Conforms	Xin zheng	Zhengguo Yao
	[☐] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-111077-01	Material:	AISI 410 75K	Coating:	WC		
Description:	5-1/8"15000psi Body bushing				Quantity:	2	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033454	22091002Q1	1287HV				
2	AP033468	22091002Q1	1276HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT							
Customer:			Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:	
Part No.:		Material:				Coating:	
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033409	HY220918-2	30HRC				
Sketch:							
Method Used:							
Acceptable Hardness:		27HRC-33HRC		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388		API Monogram:	6A-2074	Report #:	UTP-1018-004	
Part No.:	X-111398-01	Material:	AISI 4130 75K				Coating:	/	
Description:	5-1/8"15000psi Body						Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033307	RC-1010-020	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033333	RS-9-072	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1007-00 3	
Part No.:	X-275071-01	Material:	PH17-4 105K			Coating:	/	
Description:	5-1/8"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033391	HY220918-2	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130AL -00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1014-00 4
Part No.:	X-111144-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033409	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1107-003	
Part No.:	X-111398-01	Material:	AISI 4130 75K				Coating:	/	
Description:	5-1/8"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP033307	RC-1010-020	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.11		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1010-002	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033333	RS-9-072	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



LIQUID PENETRATE EXAMINATION

19



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	H220925-06
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	/
Description:	5-1/8"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000Uw/cm^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033426	22091002Q1	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-06H	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033426	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	H220925-04	
Part No.:	X-111077-01	Material:	AISI 410 75K				Coating:	/	
Description:	5-1/8"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:			3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:			≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033454	22091002Q1	Acceptable						
2	AP033468	22091002Q1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:	QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-04H	
Part No.:	X-111077-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033454	22091002Q1	Acceptable					
2	AP033468	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



LIQUID PENETRATE EXAMINATION

24



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F034		
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033307	RC-1010-020	OK	OK					

Drift Test:

Diameter ϕ 102.46 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



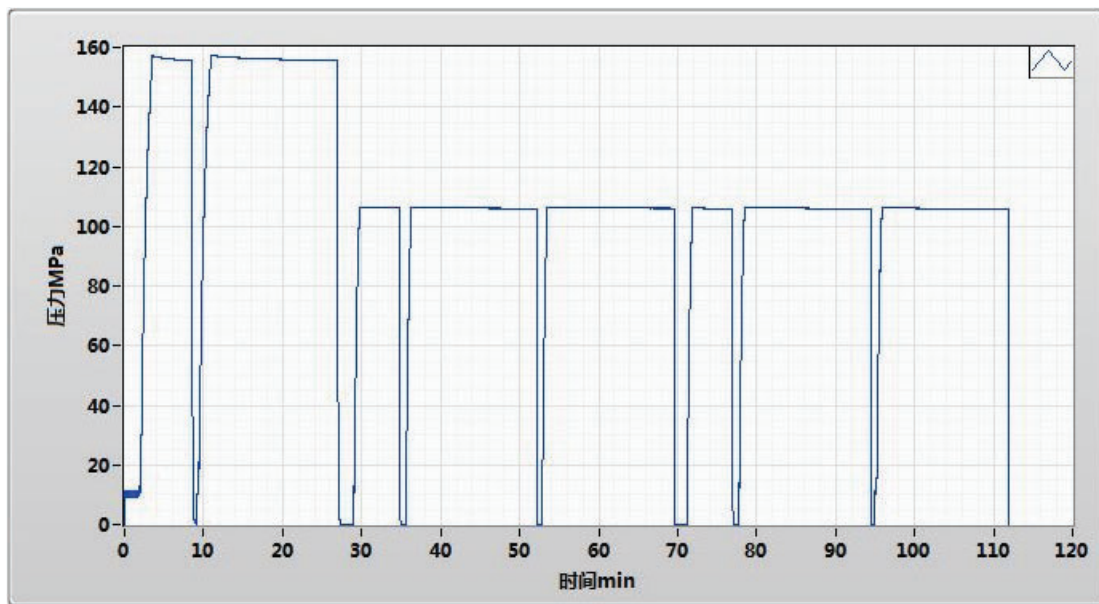
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F034	5-1/8" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.57	155.46	4.0	1.11
2	157.00	155.58	15.0	1.42
3	106.41	106.27	4.0	0.14
4	106.34	105.97	15.0	0.37
5	106.39	106.03	15.0	0.35
6	106.07	105.83	4.0	0.24
7	106.36	105.88	15.0	0.48
8	106.24	105.78	15.0	0.46



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.11



REPORT INDEX

Purchase Order: 1336

Quantity: 1EA

Shipment No.: Crate# AP033F035

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-11
4	Ultrasonic Testing	Page - 12-15
5	Magnetic Particle Inspection Report	Page - 16-23
6	Hydrostatic Test	Page - 24-25



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1336, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1336

SERIAL NO.: AP033F035

PART NO.: PFFY105/130AL-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1336



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications										
		1336	HYDRAULIC GATE VALVE		PFFY105/130AL-00	AP033F035	1	5-1/8"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st										
P/N	Parts	Description		Melting Practice			Quenched			Heat Treatment			Temper(2)										
		Melt No.	H.T. No.	Material Spec Standards	Q t y	Serial No.	Finished	Austenized Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium								
PFFY105/130A L-00	BODY	TX21-01970	RC-1010-020	AISI 4130 75K,Per ASTM A29	1	AP033308	Forging	870	4.0H	WATER	20	24	670	5.5H	AIR	/	/						
	BONNET	TX21-01970	RS-9-071	AISI 4130 75K,Per ASTM A29	1	AP033327	Forging	860	5.0H	WATER	33	35	700	5.0H	AIR	/	/						
	STEM	YX2208-2019	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033394	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	BALANCE STEM	YX2206-1508	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033485	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	GATE	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	1	AP033439	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H						
	BODY BUSHING	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	2	AP033463	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H						
Chemical Analysis (wt. %)																							
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	RC-1010-020	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	705	530	31.0	62.0	32/41/59	230HBW	JBW-300B/WDW-300
TX21-01970	RS-9-071	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	691	538	28.0	70.0	75/80/78	229HBW	JBW-300B/WDW-300
YX2208-2019	HY220918-2	0.026	0.47	0.40	0.027	0.002	15.60	4.15	/	/	/	/	3.64	0.244	/	QTC	1075	942	20.0	61.6	44/39/40	32HRC	JBW-300B/WDW-300
YX2206-1508	HY220918-2	0.025	0.52	0.35	0.028	0.001	15.75	4.12	/	/	/	/	3.63	0.231	/	QTC	1073	949	20.7	61.3	43/47/38	31HRC	JBW-300B/WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



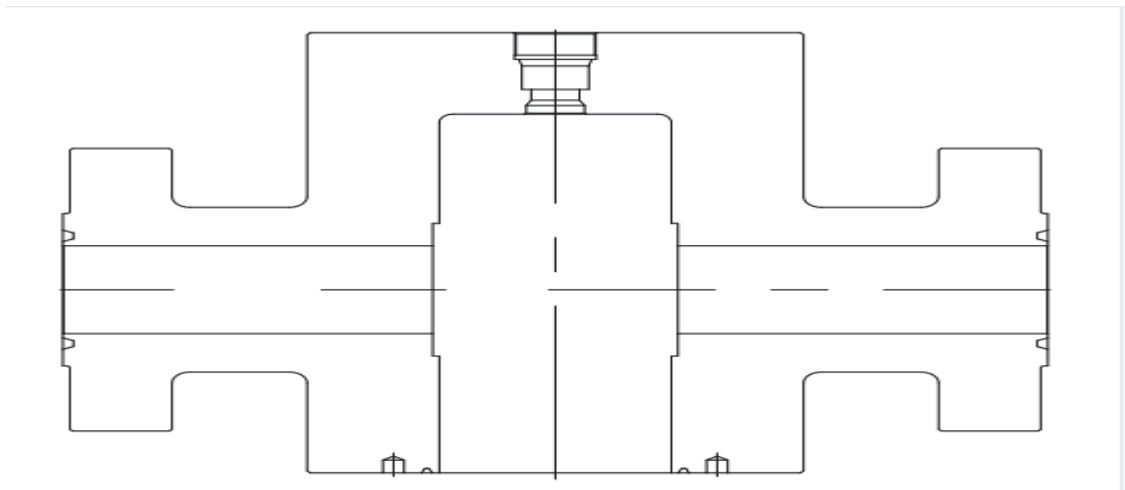
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1108-00 2
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033308	RC-1010-020	218HBW/216HBW 218HBW/221HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



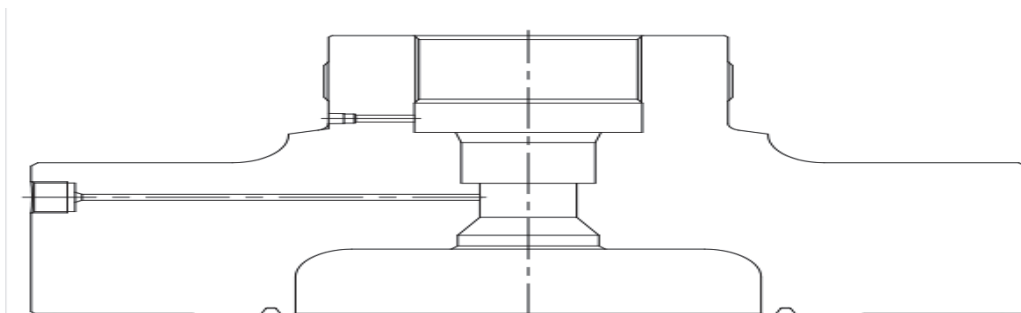
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1010-001	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033327	RS-9-071	213HBW/215HBW					

Sketch:



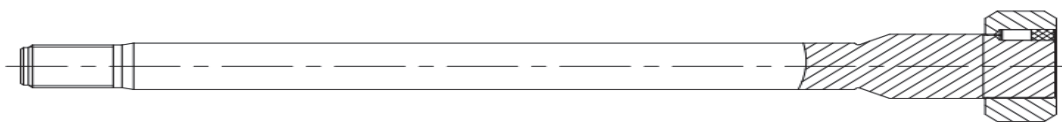
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



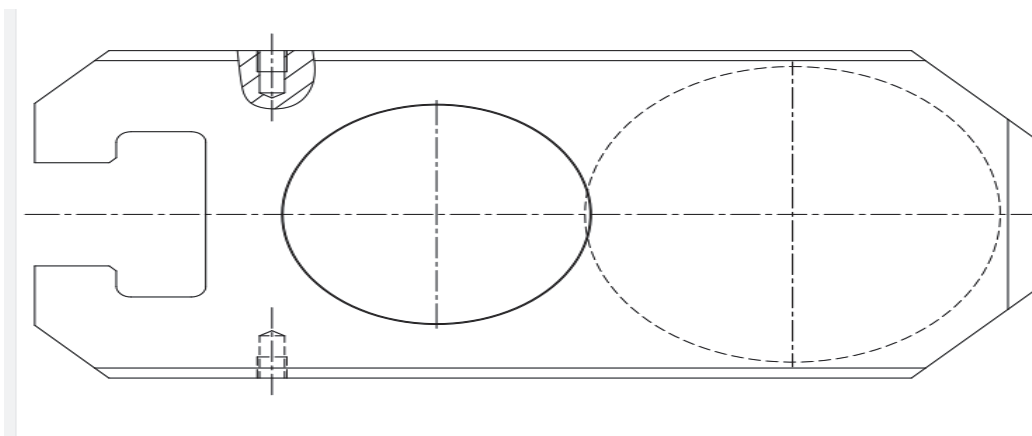
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220925-07
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC
Description:	5-1/8"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033439	22091002Q1	1338HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-111077-01	Material:	AISI 410 75K	Coating:	WC		
Description:	5-1/8"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033445	22091002Q1	1283HV				
2	AP033463	22091002Q1	1279HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



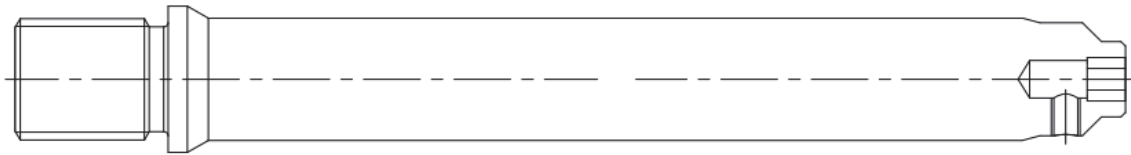
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:		Material:				Coating:		
Description:	5-1/8"15000psi Balance Stem					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033485	HY220918-2	31HRC					

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074		Report #:	UTP-1018-004	
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi Body					Quantity:	1		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033308	RC-1010-020	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu			
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II			
Equipment:	MUT-800C	Couplant:	OIL						
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng			
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033327	RS-9-071	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1007-00 3
Part No.:	X-275071-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033394	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130AL -00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1014-00 4
Part No.:	X-111144-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033485	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



MAGNETIC PARTICLE INSPECTION REPORT

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MAGNETIC PARTICLE INSPECTION REPORT

Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.



LIQUID PENETRATE EXAMINATION

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	H220925-06	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	/	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033439	22091002Q1	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-06H	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033439	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	H220925-04
Part No.:	X-111077-01	Material:	AISI 410 75K			Coating:	/	
Description:	5-1/8"15000psi Body Bushing					Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:		3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033445	22091002Q1	Acceptable					
2	AP033463	22091002Q1	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu			Organization:		QC Department	
Approved by:		Xin Zheng						
NDT Level:		MT II			Date:		2022.09	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-04H	
Part No.:	X-111077-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033445	22091002Q1	Acceptable					
2	AP033463	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ASTM E165		API Monogram:	6A-2074	Report #:	PTP-1023-001	
Part No.:	X-111144-01	Material:	PH17-4-105K				Coating:	/	
Description:	5-1/8"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033485	HY220918-2	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:	QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:	2022.10			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:		Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F035
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi					Quantity:	1
Item	Pressure	Method		Qty	Result		
Shell	22500psi	API 6A 21st		1	OK		
Seat	15000psi	API 6A 21st		1	OK		

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033308	RC-1010-020	OK	OK					

Drift Test:

Diameter ϕ 102.46 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



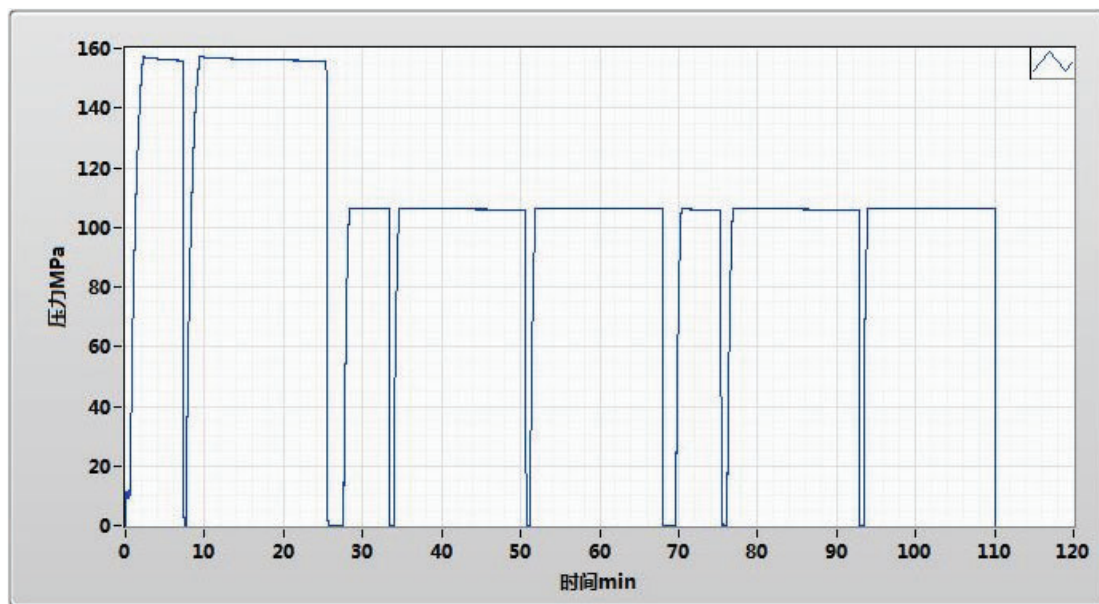
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F035	5-1/8" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.77	155.88	4.0	0.89
2	156.93	155.82	15.0	1.11
3	106.36	106.21	4.0	0.15
4	106.28	105.98	15.0	0.30
5	106.33	106.10	15.0	0.23
6	106.05	105.69	4.0	0.36
7	106.36	105.92	15.0	0.44
8	106.36	106.14	15.0	0.22



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.11



REPORT INDEX

Purchase Order: 1336

Quantity: 1EA

Shipment No.: Crate# AP033F036

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-11
4	Ultrasonic Testing	Page - 12-15
5	Magnetic Particle Inspection Report	Page - 16-23
6	Hydrostatic Test	Page - 24-25



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1336, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1336

SERIAL NO.: AP033F036

PART NO.: PFFY105/130AL-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1336



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications										
		1336	HYDRAULIC GATE VALVE		PFFY105/130AL-00	AP033F036	1	5-1/8"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st										
P/N	Parts	Description		Melting Practice			Austenized			Quenched		Heat Treatment			Temper(1)		Temper(2)						
		Melt No.	H.T. No.	Material Spec Standards	Q t y	Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium					
PFFY105/130A L-00	BODY	TX21-01970	RC-10-28	AISI 4130 75K,Per ASTM A29	1	AP033314	Forging	860	5.5H	WATER	28	39	680	6.6H	AIR	/	/	/					
	BONNET	TX21-01970	RS-9-071	AISI 4130 75K,Per ASTM A29	1	AP033323	Forging	860	5.0H	WATER	33	35	700	5.0H	AIR	/	/	/					
	STEM	YX2208-2019	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033384	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H	AIR					
	BALANCE STEM	YX2206-1508	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033486	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H	AIR					
	GATE	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	1	AP033438	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H	AIR					
	BODY BUSHING	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	2	AP033459 AP033465	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H	AIR					
Physical Properties																							
Melt No.	H.T. No.	Chemical Analysis (wt. %)										Impact (-46°C)			Hardness	Equipment Type							
		C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb			Fe	Spec Size	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)
TX21-01970	RC-10-28	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x6"x10"	QTC	674	550	45.0	50.0	62/57/45	JBW-300B/WDW-300
TX21-01970	RS-9-071	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	8"x6"x10"	QTC	691	538	28.0	70.0	75/60/78	JBW-300B/WDW-300
YX2208-2019	HY220918-2	0.026	0.47	0.40	0.027	0.002	15.60	4.15	/	/	/	/	3.64	0.244	/	ø 80x200	QTC	1075	942	20.0	61.6	44/39/40	JBW-300B/WDW-300
YX2206-1508	HY220918-2	0.025	0.52	0.35	0.028	0.001	15.75	4.12	/	/	/	/	3.63	0.231	/	ø 80x200	QTC	1073	949	20.7	61.3	43/47/38	JBW-300B/WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	200x100x100	QTC	710	555	26.5	68.0	/	JBW-300B/WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	200x100x100	QTC	710	555	26.5	68.0	/	JBW-300B/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



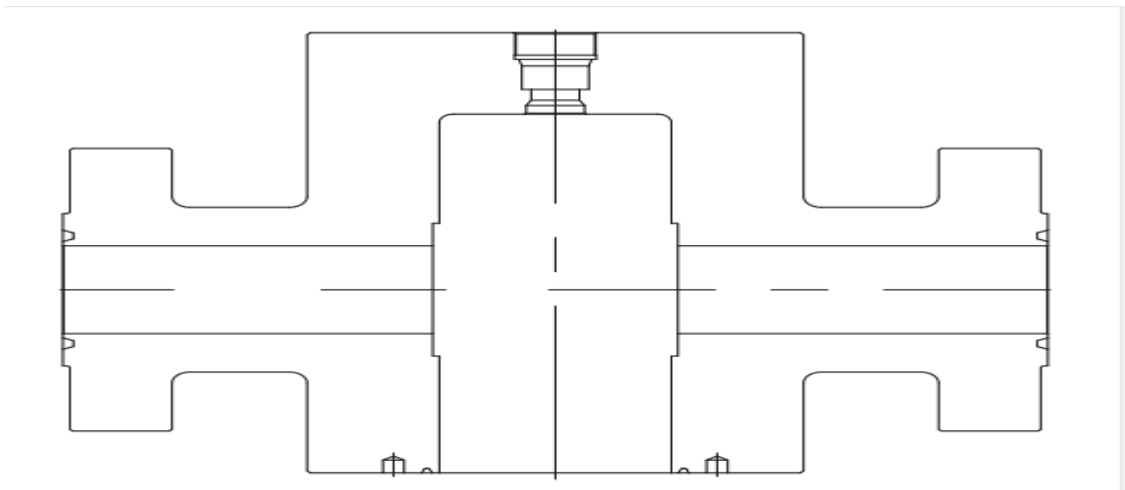
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1108-00 2
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033314	RC-10-28	210HBW/216HBW 210HBW/219HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



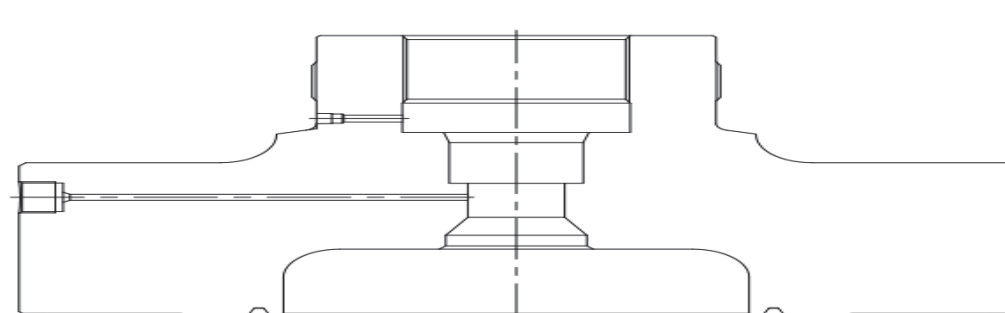
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1010-001	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033323	RS-9-071	216HBW/218HBW					

Sketch:



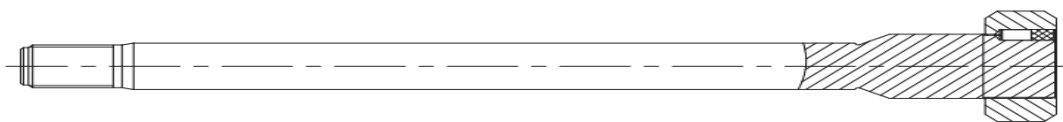
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



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[illegible]

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



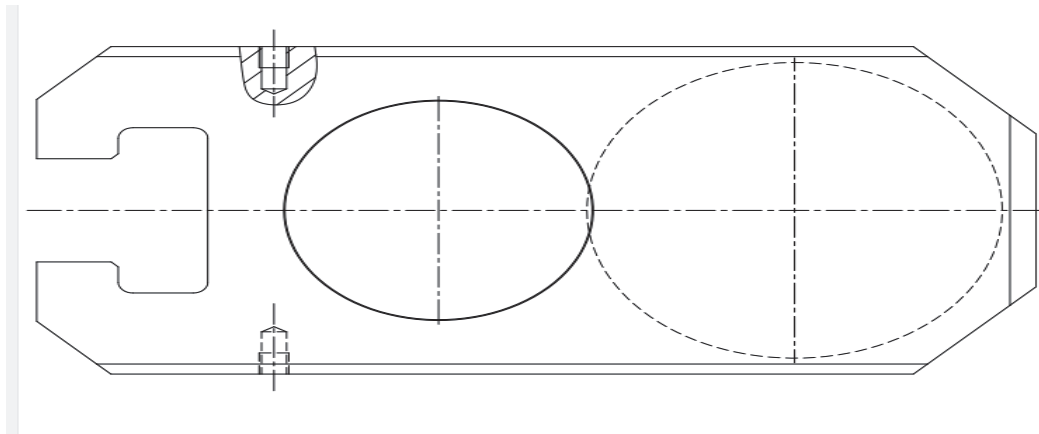
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220925-07
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC
Description:	5-1/8"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033438	22091002Q1	1306HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-111077-01	Material:	AISI 410 75K	Coating:	WC		
Description:	5-1/8"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033459	22091002Q1	1258HV				
2	AP033465	22091002Q1	1269HV				
Sketch:							
Method Used:	Impact Energy: 5Kg-f(49.03N).						
Acceptable Hardness:	≥1050HV		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



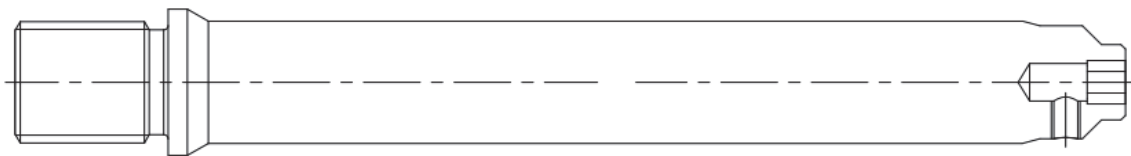
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:		Material:				Coating:		
Description:	5-1/8"15000psi Balance Stem					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033486	HY220918-2	31HRC					

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074		Report #:	UTP-1018-004	
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi Body					Quantity:	1		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033314	RC-10-28	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu			
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II			
Equipment:	MUT-800C	Couplant:	OIL						
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng			
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II			



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033323	RS-9-071	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1007-00 3	
Part No.:	X-275071-01	Material:	PH17-4 105K			Coating:	/	
Description:	5-1/8"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033384	HY220918-2	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130AL -00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1014-00 4
Part No.:	X-111144-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033486	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1107-003	
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Body					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		3100A 2800A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3310Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033314	RC-10-28	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.11		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1010-002	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		2500A 3500A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		3490Uw/cm²	
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033323	RS-9-071	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-06H	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033438	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	H220925-04
Part No.:	X-111077-01	Material:	AISI 410 75K				Coating:	/
Description:	5-1/8"15000psi Body Bushing					Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:		3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033459	22091002Q1	Acceptable					
2	AP033465	22091002Q1	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu			Organization:		QC Department	
Approved by:		Xin Zheng						
NDT Level:		MT II			Date:		2022.09	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165		API Monogram:	6A-2074	Report #:	H220925-04H	
Part No.:	X-111077-01	Material:	AISI 410 75K				Coating:	WC	
Description:	5-1/8"15000psi Body Bushing						Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:		DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:		10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033459	22091002Q1	Acceptable						
2	AP033465	22091002Q1	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		

LIQUID PENETRATE EXAMINATION

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ASTM E165	API Monogram:	6A-2074	Report #:	PTP-1023-001	
Part No.:	X-111144-01	Material:	PH17-4-105K			Coating:	/	
Description:	5-1/8"15000psi Balance Stem					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:	10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033486	HY220918-2	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F036		
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033314	RC-10-28	OK	OK					

Drift Test:

Diameter ϕ 102.46 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

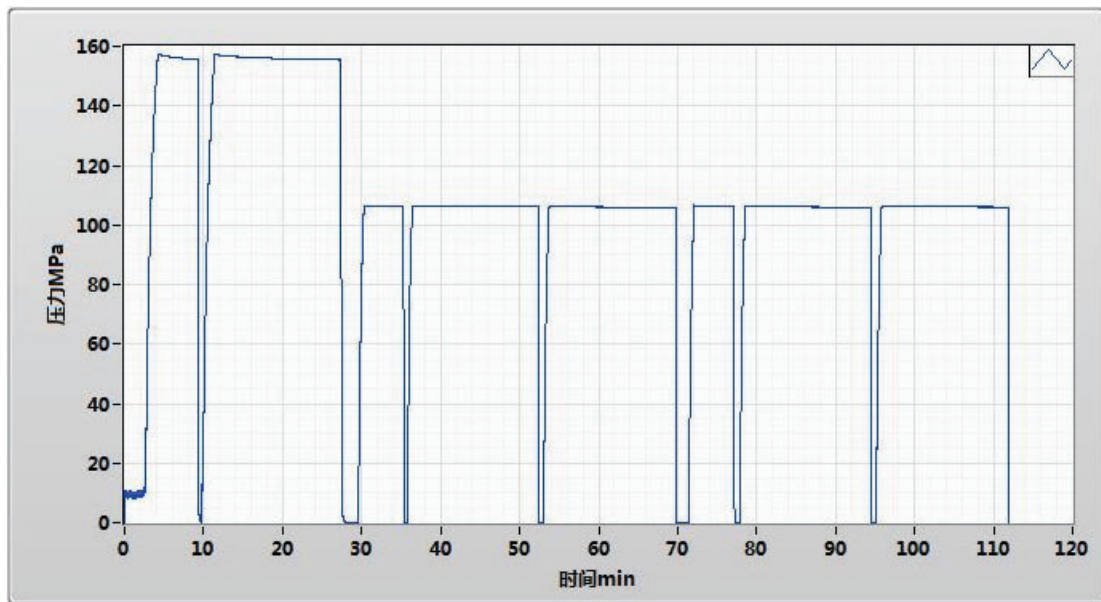
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F036	5-1/8" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.71	155.54	4.0	1.16
2	156.90	155.43	15.0	1.47
3	106.28	106.15	4.0	0.13
4	106.32	106.07	15.0	0.25
5	106.25	105.88	15.0	0.37
6	106.40	106.15	4.0	0.25
7	106.36	105.91	15.0	0.45
8	106.41	106.01	15.0	0.41



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.11



REPORT INDEX

Purchase Order: 1336

Quantity: 1EA

Shipment No.: Crate# AP033F037

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-11
4	Ultrasonic Testing	Page - 12-15
5	Magnetic Particle Inspection Report	Page - 16-23
6	Hydrostatic Test	Page - 24-25



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1336, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1336

SERIAL NO.: AP033F037

PART NO.: PFFY105/130AL-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1336



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No. 1336	Product HYDRAULIC GATE VALVE	P/N PFFY105/130AL-00	Serial No. AP033F037	Qty 1	Size 5-1/8"	WP (psi) 15000Psi	Material EE-0.5	PSL PSL3	Temp LU	Specifications API Spec 6A 21st											
P/N	Parts	Description		Melting Practice				Heat Treatment				Temper(2) Time (min)											
				Q t y		Material Spec Standards		Quenched		Temper(1) Time (min)													
		Melt No.	H.T. No.	Serial No.	Finished	Austenized Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Medium	Temp (°C)										
PFFY105/130A L-00	BODY	TX21-01970	RS-10-022	AISI 4130 75K,Per ASTM A29	1	AP033470	Forging	870	5.0H	WATER	30	33	680	5.0H	AIR	/	/						
	BONNET	TX21-01970	RS-9-071	AISI 4130 75K,Per ASTM A29	1	AP033326	Forging	860	5.0H	WATER	33	35	700	5.0H	AIR	/	/						
	STEM	YX2208-2019	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033390	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	AIR						
	BALANCE STEM	YX2206-1508	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033402	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	AIR						
	GATE	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	1	AP033428	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	AIR						
BODY BUSHING	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	2	AP033466 AP033498	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H	AIR						
Chemical Analysis (wt. %)																							
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origi n	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	RS-10-022	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	705	596	28.0	71.0	85/82/78	229HBW	JBW-300B/ WDW-300
TX21-01970	RS-9-071	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	691	538	28.0	70.0	75/80/78	229HBW	JBW-300B/ WDW-300
YX2208-2019	HY220918-2	0.026	0.47	0.40	0.027	0.002	15.60	4.15	/	/	/	/	3.64	0.244	/	QTC	1075	942	20.0	61.6	44/39/40	32HRC	JBW-300B/ WDW-300
YX2206-1508	HY220918-2	0.025	0.52	0.35	0.028	0.001	15.75	4.12	/	/	/	/	3.63	0.231	/	QTC	1073	949	20.7	61.3	43/47/38	31HRC	JBW-300B/ WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/ WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



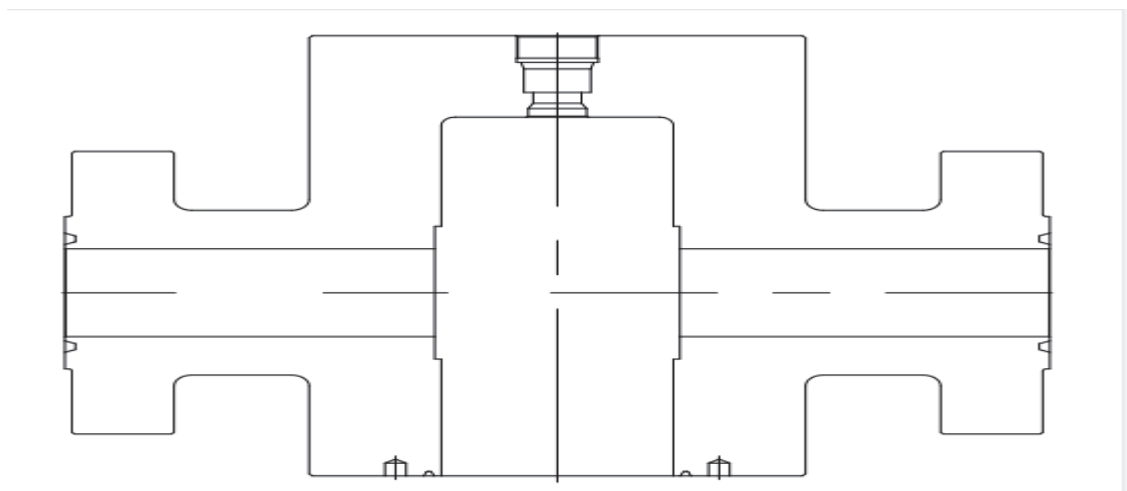
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1108-00 2
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi	Body				Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033470	RS-10-022	209HBW/213HBW 213HBW/215HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



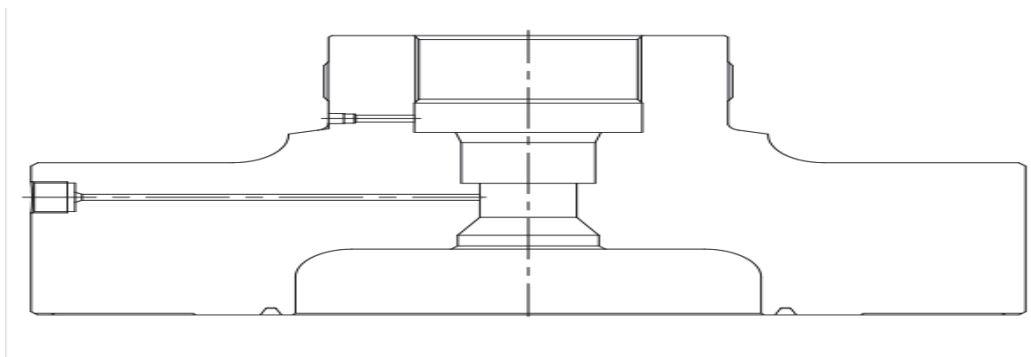
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1010-001	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033326	RS-9-071	216HBW/217HBW					

Sketch:



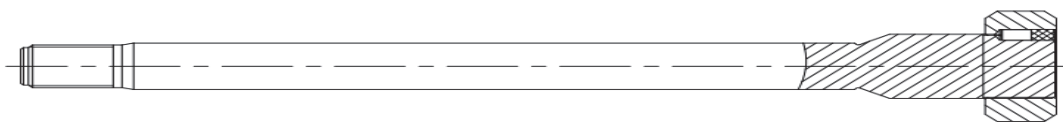
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



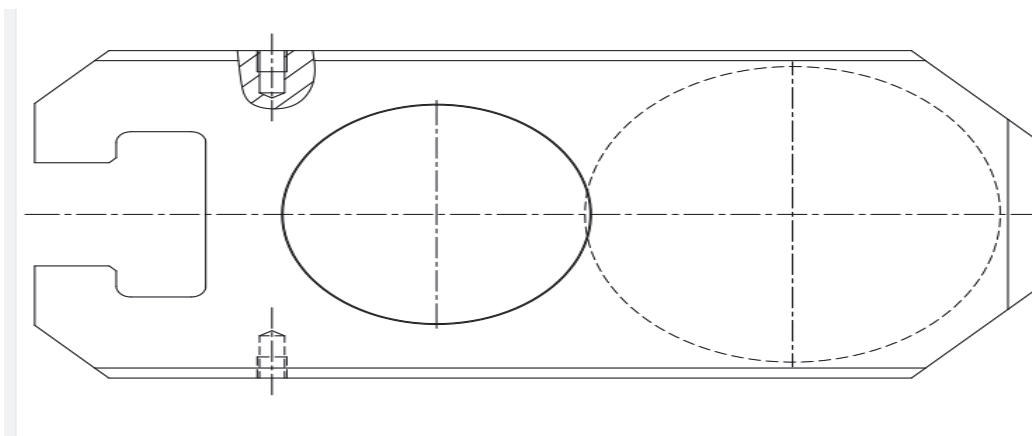
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220925-07
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC
Description:	5-1/8"15000psi Gate					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033428	22091002Q1	1325HV				

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074		
Part No.:	X-111077-01	Material:	AISI 410 75K	Coating:	WC		
Description:	5-1/8"15000psi Body bushing			Quantity:	2		
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033466	22091002Q1	1293HV				
2	AP033498	22091002Q1	1250HV				
Sketch:							
Method Used:		Impact Energy: 5Kg-f(49.03N).					
Acceptable Hardness:		≥1050HV		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



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[illegible]

A technical drawing of a bolt and nut assembly in perspective view. The bolt is a long, cylindrical fastener with a hexagonal head on the left and a hexagonal nut on the right. A dashed line runs through the center of the bolt, indicating its longitudinal axis. The drawing is a black and white line drawing with no shading or texture.

Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1018-004		
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi Body					Quantity:	1		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033470	RS-10-022	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu			
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II			
Equipment:	MUT-800C	Couplant:	OIL						
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng			
Instrmt/Ident. #:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II			



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033326	RS-9-071	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1007-00 3
Part No.:	X-275071-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033390	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130AL -00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1014-00 4
Part No.:	X-111144-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033402	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1107-003	
Part No.:	X-111398-01	Material:	AISI 4130 75K				Coating:	/	
Description:	5-1/8"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP033470	RS-10-022	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.11		

MAGNETIC PARTICLE INSPECTION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1010-002	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033326	RS-9-071	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



MAGNETIC PARTICLE INSPECTION REPORT

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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-06H	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033428	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

MAGNETIC PARTICLE INSPECTION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	H220925-04	
Part No.:	X-111077-01	Material:	AISI 410 75K				Coating:	/	
Description:	5-1/8"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3		Circular AMPS:		3200A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence		UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$		
Stage:	Machined	Concentration:	0.2ml/100ml		Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033466	22091002Q1	Acceptable						
2	AP033498	22091002Q1	Acceptable						
Inspection Coverage: Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:	Found to be satisfactory								
Inspected by:	Dongkai Xu			Organization:	QC Department				
Approved by:	Xin Zheng			Date:	2022.09				
NDT Level:	MT II								



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-04H	
Part No.:	X-111077-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033466	22091002Q1	Acceptable					
2	AP033498	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



LIQUID PENETRATE EXAMINATION

24



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F037		
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033470	RS-10-022	OK	OK					

Drift Test:

Diameter ϕ 102.46 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



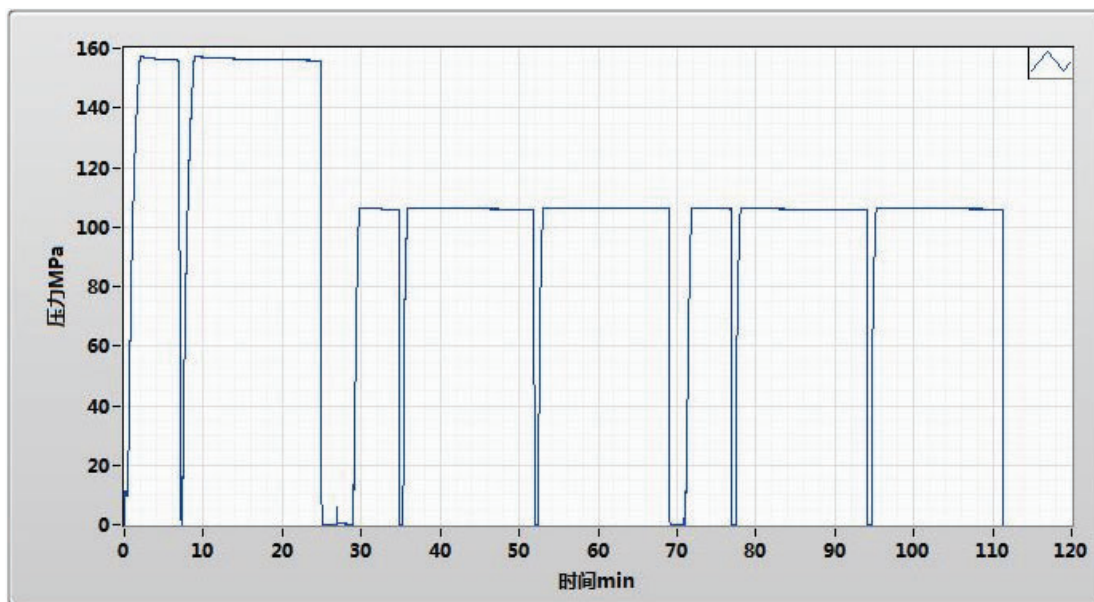
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F037	5-1/8" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.81	155.91	4.0	0.90
2	157.05	155.91	15.0	1.14
3	106.19	105.94	4.0	0.25
4	106.29	105.98	15.0	0.31
5	106.32	106.11	15.0	0.21
6	106.33	106.03	4.0	0.30
7	106.25	105.81	15.0	0.44
8	106.32	106.01	15.0	0.32



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.12



REPORT INDEX

Purchase Order: 1336

Quantity: 1EA

Shipment No.: Crate# AP033F038

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-11
4	Ultrasonic Testing	Page - 12-15
5	Magnetic Particle Inspection Report	Page - 16-23
6	Hydrostatic Test	Page - 24-25



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1336, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1336

SERIAL NO.: AP033F038

PART NO.: PFFY105/130AL-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1336



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No. 1336	Product HYDRAULIC GATE VALVE		P/N	Serial No. AP033F038	Qty 1	Size 5-1/8"	WP (psi) 15000Psi	Material EE-0.5	PSL PSL3	Temp LU	Specifications API Spec 6A 21st										
P/N	Parts	Description		Material Spec Standards	Melting Practice		Austenized			Quenched		Heat Treatment			Temper(2) Time (min) Temp (°C) Medium								
					Q t y	Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)			Medium						
		Melt No.	H.T. No.	Q t y	Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)	Time (min)	Medium						
PFFY105/130A L-00	BODY	TX21-01970	RS-10-023	AISI 4130 75K,Per ASTM A29	1	AP033473	Forging	860	5.0H	WATER	32	35	680	5.5H	AIR	/	/						
	BONNET	TX21-01970	RS-9-072	AISI 4130 75K,Per ASTM A29	1	AP033334	Forging	860	5.0H	WATER	33	35	700	5.0H	AIR	/	/						
	STEM	YX2208-2019	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033386	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	BALANCE STEM	YX2206-1508	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033408	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	GATE	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	1	AP033432	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H						
BODY BUSHING	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	2	AP033441 AP033480	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H	AIR						
Physical Properties																							
Melt No.	H.T. No.	Chemical Analysis (wt. %)										Physical Properties											
		C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	RS-10-023	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	705	596	28.0	71.0	85/82/78	229HBW	JBW-300B/ WDW-300
TX21-01970	RS-9-072	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	691	538	28.0	70.0	75/80/78	229HBW	JBW-300B/ WDW-300
YX2208-2019	HY220918-2	0.026	0.47	0.40	0.027	0.002	15.60	4.15	/	/	/	/	3.64	0.244	/	QTC	1075	942	20.0	61.6	44/39/40	32HRC	JBW-300B/ WDW-300
YX2206-1508	HY220918-2	0.025	0.52	0.35	0.028	0.001	15.75	4.12	/	/	/	/	3.63	0.231	/	QTC	1073	949	20.7	61.3	43/47/38	31HRC	JBW-300B/ WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/ WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



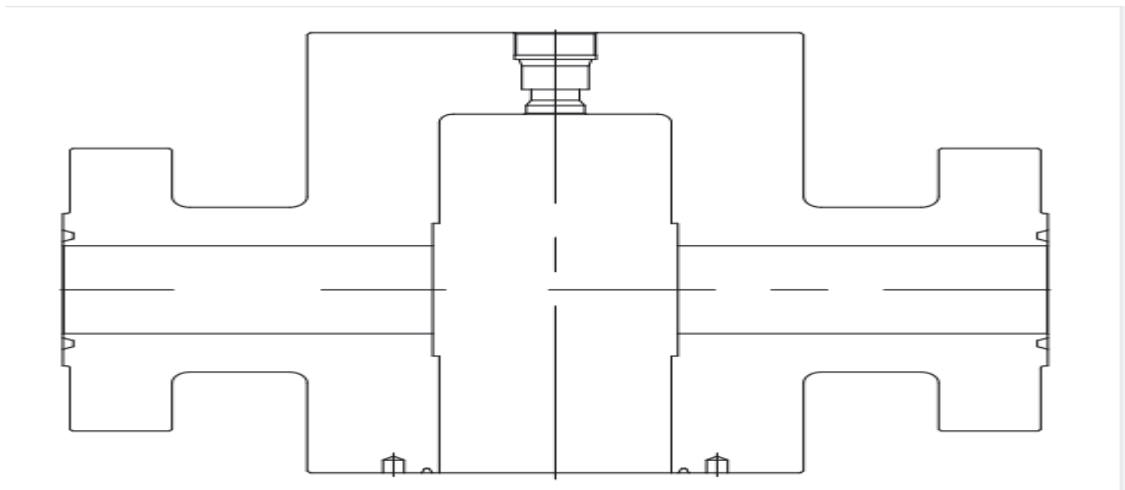
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1108-00 2
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi Body					Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033473	RS-10-023	210HBW/213HBW 210HBW/216HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



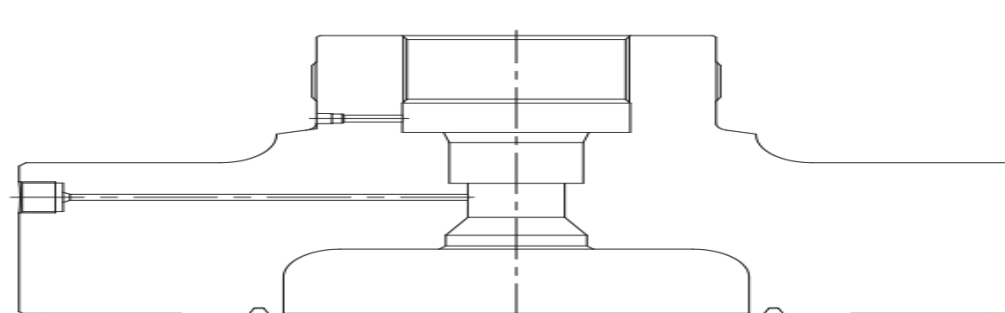
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1010-001	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033334	RS-9-072	211HBW/213HBW					

Sketch:

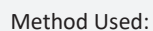


Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



HARDNESS TEST REPORT

Sketch:



Acceptable Hardness:

27HRC-33HRC

Approved By:

Examined By:

Judgments:

[V] Conforms

☐ Does Not Conform

Xin zheng

Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

The image displays a technical drawing of a mechanical component, likely a shaft or a housing, showing both front and top views. The front view (top) features a central circular feature with a vertical centerline and a horizontal centerline. The top view (bottom) shows a rectangular shape with rounded corners and a central circular feature, also with a vertical centerline and a horizontal centerline. The drawing includes various construction lines, such as dashed lines for hidden features and solid lines for visible edges. The overall shape is elongated and symmetrical.

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	20220925-03
Part No.:	X-111077-01	Material:	AISI 410 75K	Coating:	/		
Description:	5-1/8"15000psi Body bushing				Quantity:	2	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033441	22091002Q1	230HBW				
2	AP033460	22091002Q1	231HBW				
Sketch:							
Method Used:	Impact Energy: 3000Kg.		Diameter of tungsten ball: 10mm				
Acceptable Hardness:	207HBW-235HBW		Approved By:			Examined By:	
Judgments:	[V] Conforms		Xin zheng			Zhengguo Yao	
	[] Does Not Conform						



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220925-08
Part No.:	X-111077-01	Material:	AISI 410 75K	Coating:	WC	Description:	5-1/8"15000psi Body bushing
Quantity:						2	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033441	22091002Q1	1293HV				
2	AP033460	22091002Q1	1296HV				
Sketch:							
Method Used:		Impact Energy: 5Kg-f(49.03N).					
Acceptable Hardness:		≥1050HV		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



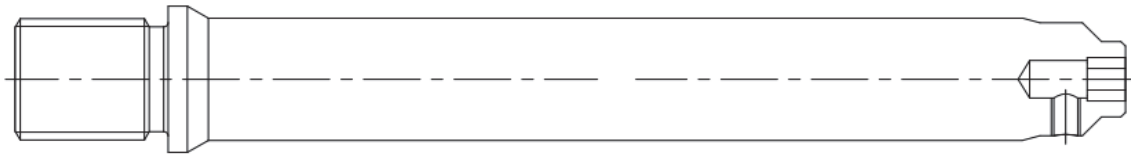
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:		Material:				Coating:		
Description:	5-1/8"15000psi Balance Stem					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033408	HY220918-2	30HRC					

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms ☐] Does Not Conform	Xin zheng	Zhengguo Yao



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1018-004		
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi Body					Quantity:	1		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033473	RS-10-023	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu			
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II			
Equipment:	MUT-800C	Couplant:	OIL						
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng			
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II			



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033334	RS-9-072	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1007-00 3	
Part No.:	X-275071-01	Material:	PH17-4 105K			Coating:	/	
Description:	5-1/8"15000psi Stem					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033386	HY220918-2	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C		Couplant:	OIL				
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130AL -00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1014-00 4
Part No.:	X-111144-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033408	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	MTP-1107-003	
Part No.:	X-111398-01	Material:	AISI 4130 75K				Coating:	/	
Description:	5-1/8"15000psi Body						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		3100A 2800A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		3310Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.		Result
1	AP033473	RS-10-023	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.11		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	MTP-1010-002	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		2500A 3500A		
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		3490Uw/cm²		
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033334	RS-9-072	Acceptable					
Inspection Coverage:								
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	PTP-1012-001
Part No.:	X-275071-01	Material:	PH17-4-105K			Coating:	/
Description:	5-1/8"15000psi Stem					Quantity:	1
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3	Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5	Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min	Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033386	HY220918-2	Acceptable				
Inspection Coverage:							
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.10		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709	API Monogram:	6A-2074	Report #:	H220925-06
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	/
Description:	5-1/8"15000psi Gate					Quantity:	1
Equipment:	CYD-5000	Acceptance Criteria:	API 6A 21st/PSL3	Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:	Fluorescence	UV-Light Intensity:		$\geq 1000\text{Uw/cm}^2$	
Stage:	Machined	Concentration:	0.2ml/100ml	Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033432	22091002Q1	Acceptable				
Inspection Coverage:							
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.							
Evaluation & Disposition:	Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department		
Approved by:	Xin Zheng						
NDT Level:	MT II			Date:	2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-06H	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033432	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	H220925-04	
Part No.:	X-111077-01	Material:	AISI 410 75K				Coating:	/	
Description:	5-1/8"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:			3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:			≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033441	22091002Q1	Acceptable						
2	AP033460	22091002Q1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-04H	
Part No.:	X-111077-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033441	22091002Q1	Acceptable					
2	AP033460	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ASTM E165		API Monogram:	6A-2074	Report #:	PTP-1023-001	
Part No.:	X-111144-01	Material:	PH17-4-105K				Coating:	/	
Description:	5-1/8"15000psi Balance Stem						Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:		API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:		DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:		10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033408	HY220918-2	Acceptable						
Inspection Coverage:									
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:	QC Department			
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:	2022.10			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:		Customer PO#:	1336	Date:	November, 2022
Drawing #:	PFFY105/130 AL-00	Specification:	API6A-21st	API Monogram:	6A-2074
Report #:	AP033F038				
Part No.:	X-111398-01	Material:	AISI 4130 75K		Coating:
Description:	5-1/8"15000psi				Quantity:
				1	
Item	Pressure	Method		Qty	Result
Shell	22500psi	API 6A 21st		1	OK
Seat	15000psi	API 6A 21st		1	OK

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033473	RS-10-023	OK	OK					

Drift Test:

Diameter ϕ 102.46 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

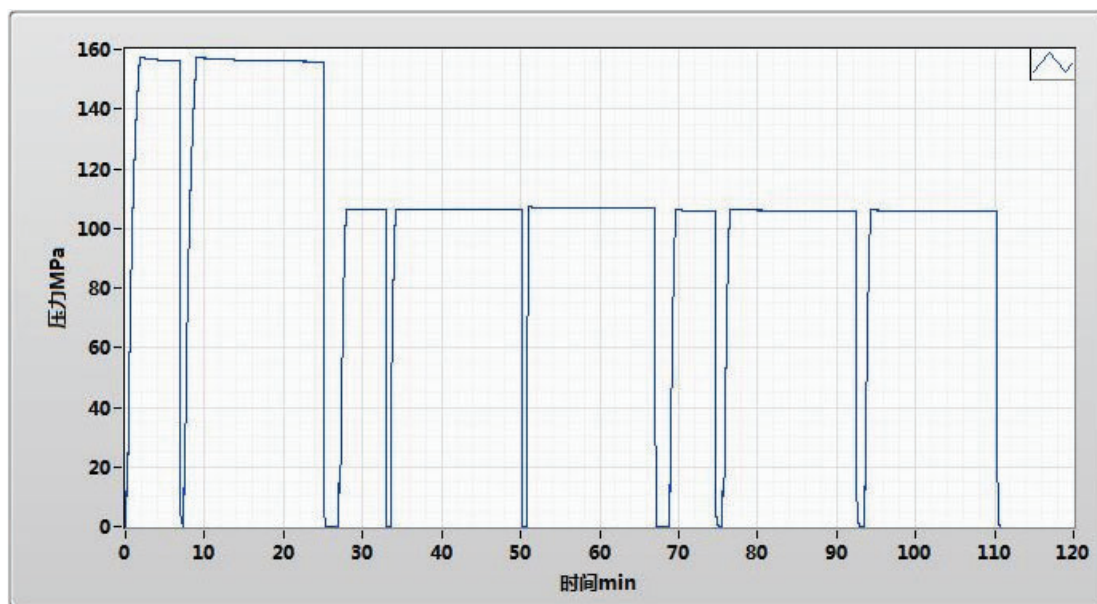
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F038	5-1/8" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.87	156.00	4.0	0.87
2	157.04	155.88	15.0	1.16
3	106.29	106.13	4.0	0.16
4	106.37	106.07	15.0	0.30
5	107.03	106.65	15.0	0.38
6	105.99	105.64	4.0	0.35
7	106.25	105.65	15.0	0.60
8	106.03	105.59	15.0	0.45



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.12



REPORT INDEX

Purchase Order: 1336

Quantity: 1EA

Shipment No.: Crate# AP033F039

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-11
4	Ultrasonic Testing	Page - 12-15
5	Magnetic Particle Inspection Report	Page - 16-23
6	Hydrostatic Test	Page - 24-25



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1336, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1336

SERIAL NO.: AP033F039

PART NO.: PFFY105/130AL-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1336



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No.	Product		P/N	Serial No.	Qty	Size	WP (psi)	Material	PSL	Temp	Specifications										
		1336	HYDRAULIC GATE VALVE		PFFY105/130AL-00	AP033F039	1	5-1/8"	15000Psi	EE-0.5	PSL3	LU	API Spec 6A 21st										
P/N	Parts	Description		Melting Practice			Quenched			Heat Treatment			Temper(2)										
		Melt No.	H.T. No.	Material Spec Standards	Q t y	Serial No.	Finished	Austenized Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium								
PFFY105/130A L-00	BODY	TX21-01970	RC-1010-020	AISI 4130 75K,Per ASTM A29	1	AP033305	Forging	870	4.0H	WATER	20	24	670	5.5H	AIR	/	/						
	BONNET	TX21-01970	RS-9-071	AISI 4130 75K,Per ASTM A29	1	AP033322	Forging	860	5.0H	WATER	33	35	700	5.0H	AIR	/	/						
	STEM	YX2208-2019	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033388	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	BALANCE STEM	YX2206-1508	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033396	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	GATE	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	1	AP033425	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H						
	BODY BUSHING	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	2	AP033496 AP033443	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H						
Chemical Analysis (wt. %)																							
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	RC-1010-020	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	705	530	31.0	62.0	32/41/59	230HBW	JBW-300B/WDW-300
TX21-01970	RS-9-071	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	691	538	28.0	70.0	75/80/78	229HBW	JBW-300B/WDW-300
YX2208-2019	HY220918-2	0.026	0.47	0.40	0.027	0.002	15.60	4.15	/	/	/	/	3.64	0.244	/	QTC	1075	942	20.0	61.6	44/39/40	32HRC	JBW-300B/WDW-300
YX2206-1508	HY220918-2	0.025	0.52	0.35	0.028	0.001	15.75	4.12	/	/	/	/	3.63	0.231	/	QTC	1073	949	20.7	61.3	43/47/38	31HRC	JBW-300B/WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



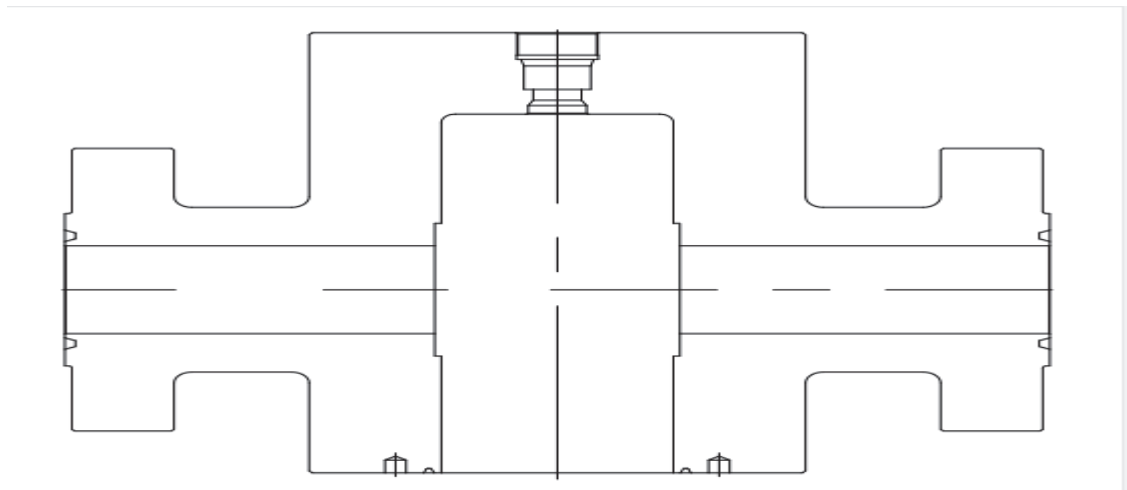
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1108-00 2
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi	Body				Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033305	RC-1010-020	227HBW/223HBW 229HBW/229HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



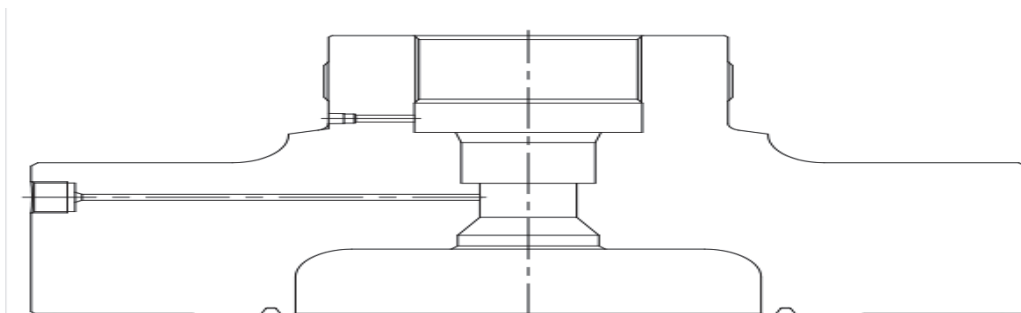
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1010-001	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033322	RS-9-071	210HBW/212HBW					

Sketch:



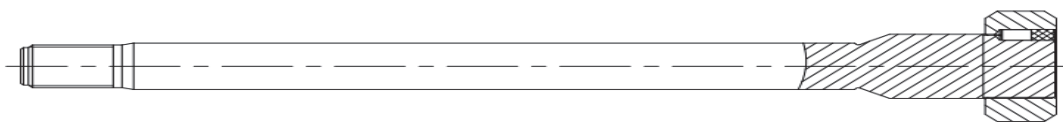
Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



HARDNESS TEST REPORT

9



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:			Date:	
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220925-08
Part No.:	X-111077-01	Material:	AISI 410 75K			Coating:	WC
Description:	5-1/8"15000psi Body bushing					Quantity:	2
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033496	22091002Q1	1286HV				
2	AP033443	22091002Q1	1276HV				
Sketch: The sketch shows a side view of a mechanical part, identified as a body bushing. It features two main vertical sections separated by a central gap. The left section has a wider base at the bottom and tapers slightly towards the top. The right section is more uniform in width. Both ends of the part have small rectangular protrusions or tabs extending outwards. A horizontal centerline runs through the middle of the entire assembly, indicating symmetry.							
Method Used:		Impact Energy: 5Kg-f(49.03N).					
Acceptable Hardness:		≥1050HV		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



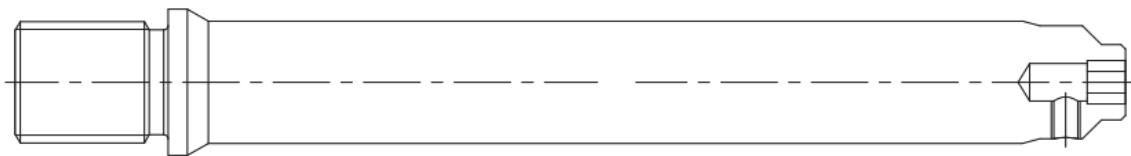
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:		Customer PO#:		Date:	
Drawing #:		Specification:		API Monogram:	
Part No.:		Material:		Coating:	
Description:	5-1/8"15000psi Balance Stem			Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N
1	AP033396	HY220918-2	29HRC		

Sketch:



Method Used:			
Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



安澜科技（江苏）股份有限公司
ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1018-004		
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi Body					Quantity:	1		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033305	RC-1010-020	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu			
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II			
Equipment:	MUT-800C	Couplant:	OIL						
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng			
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II			



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi Bonnet					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033322	RS-9-071	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1007-00 3
Part No.:	X-275071-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033388	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD



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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:			Date:	2022
Drawing #:	PFFY105/130AL -00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1014-00 4
Part No.:	X-111144-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Balance Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033396	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



MAGNETIC PARTICLE INSPECTION REPORT

17



MAGNETIC PARTICLE INSPECTION REPORT

Inspection Coverage:

Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.



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[illegible]

Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.

Evaluation & Disposition:	Found to be satisfactory		
Inspected by:	Dongkai Xu	Organization:	QC Department
Approved by:	Xin Zheng		
NDT Level:	MT II	Date:	2022.10



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	H220925-06	
Part No.:	X-275174-01	Material:	AISI 410 75K				Coating:	/	
Description:	5-1/8"15000psi Gate						Quantity:	1	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3		Circular AMPS:		1600A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence		UV-Light Intensity:		≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml		Magnetizing Time:		1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033425	22091002Q1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-06H	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:	DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:	≥1076Lx		
Stage:	Machined	Penetrate Time:	10min		Develop Time:	10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033425	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:	Dongkai Xu			Organization:	QC Department			
Approved by:	Xin Zheng							
NDT Level:	MT II			Date:	2022.09			



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	API Spec 6A 21st /ASTM E709		API Monogram:	6A-2074	Report #:	H220925-04	
Part No.:	X-111077-01	Material:	AISI 410 75K				Coating:	/	
Description:	5-1/8"15000psi Body Bushing						Quantity:	2	
Equipment:	CYD-5000	Acceptance Criteria:		API 6A 21st/PSL3	Circular AMPS:			3200A	
Test Method:	Fluorescence Wet Continuous	Particle Type:		Fluorescence	UV-Light Intensity:			≥1000Uw/cm²	
Stage:	Machined	Concentration:		0.2ml/100ml	Magnetizing Time:			1-3S	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033496	22091002Q1	Acceptable						
2	AP033443	22091002Q1	Acceptable						
Inspection Coverage:									
Fluorescent magnetic particle inspection was performed on all accessible wetted/sealing surfaces.									
Evaluation & Disposition:		Found to be satisfactory							
Inspected by:		Dongkai Xu			Organization:		QC Department		
Approved by:		Xin Zheng							
NDT Level:		MT II			Date:		2022.09		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ ASTM E165	API Monogram:	6A-2074	Report #:	H220925-04H	
Part No.:	X-111077-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Body Bushing					Quantity:	2	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3		Penetrate Type:		DPT-5	
Remover Type:	DPT-5	Developer Type:	DPT-5		Light Intensity:		≥1076Lx	
Stage:	Machined	Penetrate Time:	10min		Develop Time:		10min	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033496	22091002Q1	Acceptable					
2	AP033443	22091002Q1	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.09		

LIQUID PENETRATE EXAMINATION

Customer:			Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130AL-00	Specification:	QJ/JJ07.01.03.02/ASTM E165	API Monogram:	6A-2074	Report #:	PTP-1023-001	
Part No.:	X-111144-01	Material:	PH17-4-105K			Coating:	/	
Description:	5-1/8"15000psi Balance Stem					Quantity:	1	
Test Method:	Type II Method C	Acceptance Criteria:	API 6A 21st/PSL3	Penetrate Type:		DPT-5		
Remover Type:	DPT-5	Developer Type:	DPT-5	Light Intensity:		≥1076Lx		
Stage:	Machined	Penetrate Time:	10min	Develop Time:		10min		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033396	HY220918-2	Acceptable					
Inspection Coverage:								
Liquid penetrate examination was performed on all accessible wetted/sealing surfaces.								
Evaluation & Disposition:		Found to be satisfactory						
Inspected by:		Dongkai Xu		Organization:		QC Department		
Approved by:		Xin Zheng						
NDT Level:		MT II		Date:		2022.10		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HYDROSTATIC TEST REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API6A-21st	API Monogram:	6A-2074	Report #:	AP033F039		
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi					Quantity:	1		
Item	Pressure	Method			Qty	Result			
Shell	22500psi	API 6A 21st			1	OK			
Seat	15000psi	API 6A 21st			1	OK			

Item	S/N	Heat Log No.	Result		Item	S/N	Heat Log No.	Result	
			A	B				A	B
1	AP033305	RC-1010-020	OK	OK					

Drift Test:

Diameter ϕ 102.46 mm drift test gauge can freely pass through the through hole of the valve.

Inspection Coverage:

Per Specification & Requirements: API 6A 21st

		Approved By:	Examined By:
Judgments:	[V] Conforms	Xin Zheng	Yifei Ma
	[] Does Not Conform		



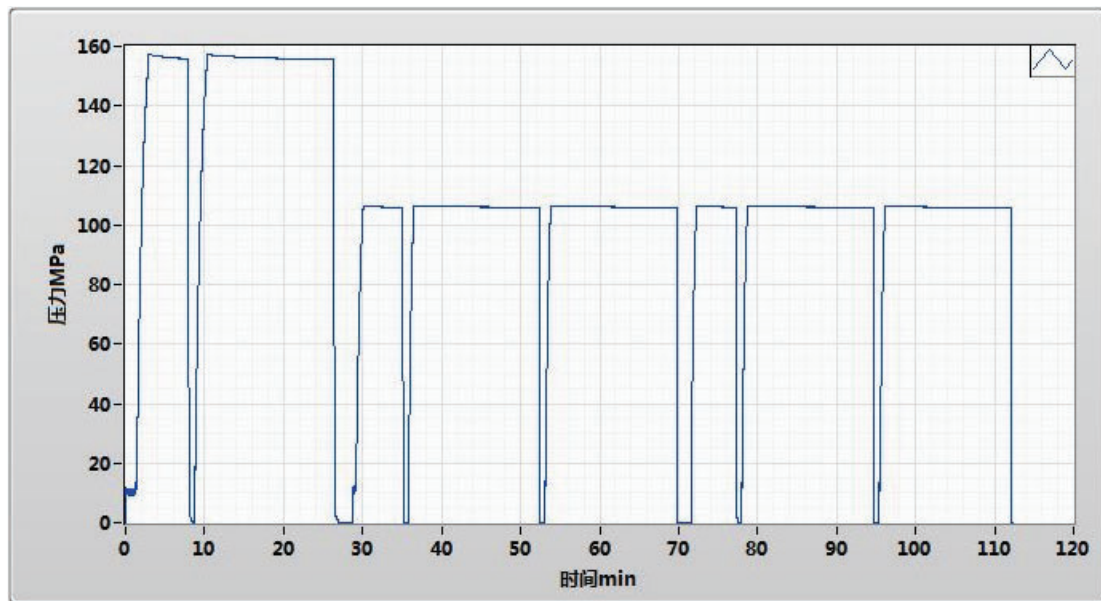
Pressure Test Report

Product Information

PRODUCT NAME	PRODUCT NO.	SPECS	PRESSURE TEST STANDARDS	TEST PART	EQUIPMENT NO.	BRAND
Hydraulic Gate Valve	AP033F039	5-1/8" 15000Psi	API 6A 21st	Shell & Seat	2#	

Test Data

LEVEL	INITIAL PRESSURE (Mpa)	TERMINATED PRESSURE (Mpa)	HOLDING TIME (Min)	PRESSURE DROPPING (Mpa)
1	156.77	155.75	4.0	1.02
2	156.95	155.59	15.0	1.37
3	106.12	105.94	4.0	0.18
4	106.33	105.93	15.0	0.41
5	106.32	105.92	15.0	0.40
6	106.21	105.95	4.0	0.26
7	106.34	105.88	15.0	0.46
8	106.27	105.90	15.0	0.37



TESTED BY:	INSPECTED BY:	REVIEWED BY:	DATE:
Yifei Ma	Xin Zheng	Zhicheng Feng	2022.11.14



REPORT INDEX

Purchase Order: 1336

Quantity: 1EA

Shipment No.: Crate# AP033F040

Shipment Date: November, 2022

Activity No.	Characteristics	Reference Page
1	CERTIFICATE OF CONFORMITY	Page - 2
2	Metallurgical Test Certificate	Page - 3
2.1	Mechanical Testing	Page - 3
2.2	Chemical Testing	Page -3
2.3	Heat Treatment	Page - 3
3	Hardness Test	Page - 4-11
4	Ultrasonic Testing	Page - 12-15
5	Magnetic Particle Inspection Report	Page - 16-23
6	Hydrostatic Test	Page - 24-25



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

CERTIFICATE OF CONFORMITY

THE FOLLOWING ITEM IS IN CONFORMITY WITH PO # 1336, DRAWINGS AND ITS TECHNICAL REQUIREMENTS. IT IS MADE PER API – 6A MONOGRAM SPECIFICATIONS, EE-0.5 CLASS, PSL3, PR1, LU. AND IT IS MADE OF MATERIAL (4130,75K YIELD) FOR NACE H2S SERVICE UNDER THE CURRENT NACE MR0175 EDITION.

ITEM:

PO #: 1336

SERIAL NO.: AP033F040

PART NO.: PFFY105/130AL-00

QANTITY: 1

INSPECTION STANDARD: API Spec 6A 21st EE-0.5, PSL3, PR1, LU

THIS COMMODITY HAS PASSED ALL THE TECHNICAL AND PERFORMANCE TESTS CARRIED BY QUALITY CONTROL/INSPECTION DEPARTMENT.

COMPANY NAME:

INSPECTOR: Zhicheng Feng

(STAMP)

CHIEF ENGINEER: Xin Zheng

EX-FACTORY DATE: November, 2022

Customer: _____

P.O. Number: 1336



安澜科技（江苏）股份有限公司

No.: AV00012

Date:November, 2022

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD
Certified Material Test Report

Customer		PO No. 1336	Product HYDRAULIC GATE VALVE		P/N PFFY105/130AL-00		Serial No. AP033F040		Qty 1	Size 5-1/8"	WP (psi) 15000Psi	Material EE-0.5	PSL PSL3	Temp LU	Specifications API Spec 6A 21st								
P/N	Parts	Description			Melting Practice			Austenized		Quenched		Heat Treatment			Temper(2)								
		Melt No.	H.T. No.	Material Spec Standards	Q t y	Serial No.	Finished	Temp (°C)	Time (min)	Medium	Start Temp	Finish Temp	Temp (°C)	Time (min)	Medium	Temp (°C)							
PFFY105/130A L-00	BODY	TX21-01970	RS-10-023	AISI 4130 75K,Per ASTM A29	1	AP033472	Forging	860	5.0H	WATER	32	35	680	5.5H	AIR	/	/						
	BONNET	TX21-01970	RS-9-072	AISI 4130 75K,Per ASTM A29	1	AP033478	Forging	860	5.0H	WATER	33	35	700	5.0H	AIR	/	/						
	STEM	YX2208-2019	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033381	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	BALANCE STEM	YX2206-1508	HY220918-2	PH17-4 105K,Per ASTM A564/564M	1	AP033489	Forging	1030	3.5H	WATER	26	29	630	5.0H	AIR	630	5.0H						
	GATE	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	1	AP033435	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H						
BODY BUSHING	2015802331	22091002Q1	AISI 410 75K,Per ASTM A276/276M	2	AP033453	Forging	990	4.5H	OIL	39	43	720	5.5H	AIR	680	5.5H							
Chemical Analysis (wt. %)																							
Melt No.	H.T. No.	C	Mn	Si	P	S	Cr	Ni	Mo	V	Co	W	Cu	Nb	Fe	Spec Origin	Tensile (MPa)	Yield (MPa)	Elongatio n (%)	ROA (%)	Impact (46°C) Impact direction (Transverse)	Hardness	Equipment Type
TX21-01970	RS-10-023	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	705	596	28.0	71.0	85/82/78	229HBW	JBW-300B/ WDW-300
TX21-01970	RS-9-072	0.32	0.64	0.24	0.013	0.003	0.99	0.21	0.207	0.006	/	/	0.02	/	/	QTC	691	538	28.0	70.0	75/80/78	229HBW	JBW-300B/ WDW-300
YX2208-2019	HY220918-2	0.026	0.47	0.40	0.027	0.002	15.60	4.15	/	/	/	/	3.64	0.244	/	QTC	1075	942	20.0	61.6	44/39/40	32HRC	JBW-300B/ WDW-300
YX2206-1508	HY220918-2	0.025	0.52	0.35	0.028	0.001	15.75	4.12	/	/	/	/	3.63	0.231	/	QTC	1073	949	20.7	61.3	43/47/38	31HRC	JBW-300B/ WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/ WDW-300
2015802331	22091002Q1	0.11	0.39	0.36	0.018	0.003	11.66	0.09	0.04	/	/	/	0.05	/	/	QTC	710	555	26.5	68.0	/	217HBW	JBW-300B/ WDW-300

This is to certify that all above items have been tested and inspected per scope of specifications, drawings, and the purchase order and have been found to be satisfactory.

The information in this report is true and correct to our knowledge.

Xin Zheng

NAME of QA Manager, for and on the authority of COMPANY NAME



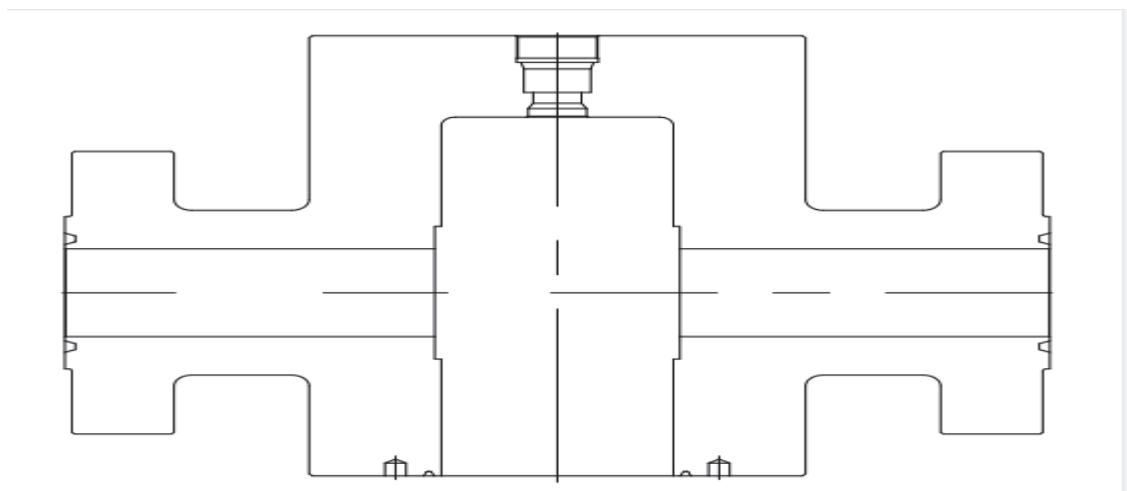
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ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:	
							2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1108-00 2
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/
Description:	5-1/8"15000psi	Body				Quantity:	1
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033472	RS-10-023	215HBW/210HBW 219HBW/222HBW				

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



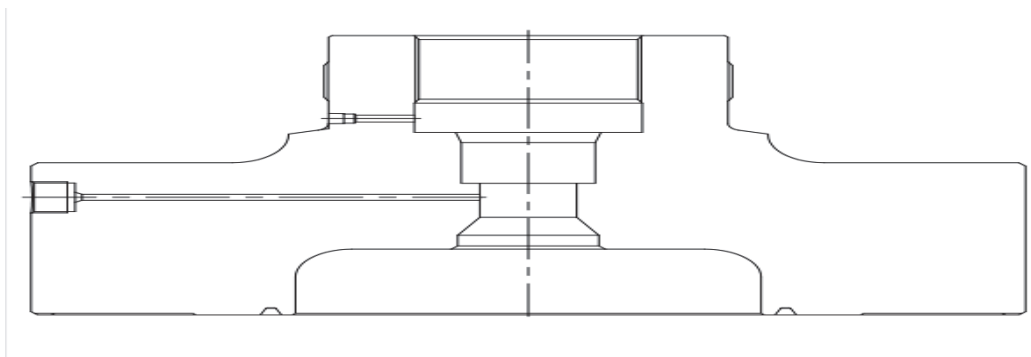
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:				Customer PO#:			Date:	2022
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074	Report #:	HP-1010-001	
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033478	RS-9-072	216HBW/218HBW					

Sketch:



Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	197HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms [] Does Not Conform	Xin zheng	Zhengguo Yao



HARDNESS TEST REPORT

Sketch:





ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

Method Used:	Impact Energy: 3000Kg.	Diameter of tungsten ball: 10mm	
Acceptable Hardness:	207HBW-235HBW	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



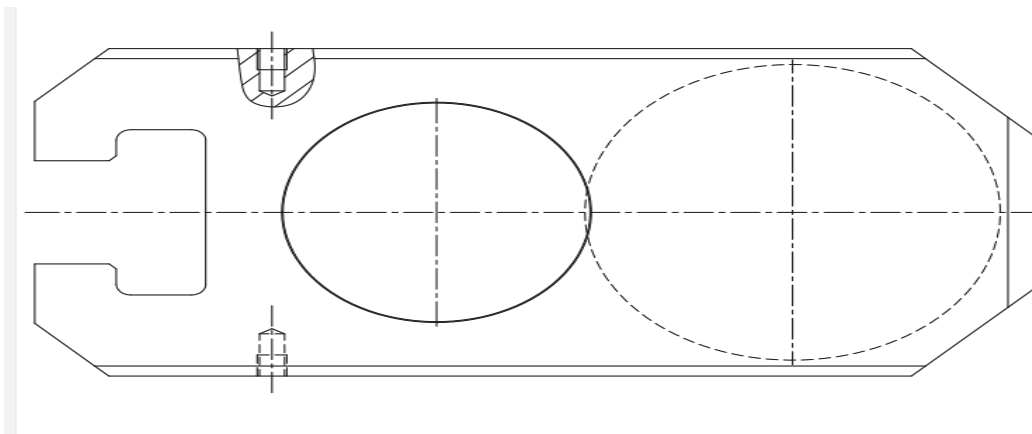
安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

HARDNESS TEST REPORT

Customer:			Customer PO#:			Date:		
							2022	
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220925-07	
Part No.:	X-275174-01	Material:	AISI 410 75K			Coating:	WC	
Description:	5-1/8"15000psi Gate					Quantity:	1	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness	
1	AP033435	22091002Q1	1311HV					

Sketch:



Method Used:	Impact Energy: 5Kg-f(49.03N).		
Acceptable Hardness:	≥1050HV	Approved By:	Examined By:
Judgments:	[V] Conforms	Xin zheng	Zhengguo Yao
	[] Does Not Conform		



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E10	API Monogram:	6A-2074		
Part No.:	X-111077-01	Material:	AISI 410 75K	Coating:	/		
Description:	5-1/8"15000psi Body bushing				Quantity:	2	
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033501	22091002Q1	214HBW				
2	AP033453	22091002Q1	234HBW				
Sketch:							
The sketch shows a side view of a cylindrical component with a central longitudinal slot. The left end has a flange with two small rectangular features. The right end also has a similar flange. A vertical centerline indicates symmetry.							
Method Used:	Impact Energy: 3000Kg.		Diameter of tungsten ball: 10mm				
Acceptable Hardness:	207HBW-235HBW		Approved By:		Examined By:		
Judgments:	[V] Conforms		Xin zheng		Zhengguo Yao		
	[] Does Not Conform						



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

Customer:		Customer PO#:		Date:			
					2022		
Drawing #:	PFFY105/130A L-00	Specification:	API Spec 6A 21st /ASTM E92	API Monogram:	6A-2074	Report #:	20220925-08
Part No.:	X-111077-01	Material:	AISI 410 75K			Coating:	WC
Description:	5-1/8"15000psi Body bushing					Quantity:	2
Item	S/N	Heat Log No.	Hardness	Item	S/N	Heat Log No.	Hardness
1	AP033501	22091002Q1	1300HV				
2	AP033453	22091002Q1	1292HV				
Sketch:							
Method Used:		Impact Energy: 5Kg-f(49.03N).					
Acceptable Hardness:		≥1050HV		Approved By:		Examined By:	
Judgments:		[V] Conforms		Xin zheng		Zhengguo Yao	
		[] Does Not Conform					



ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

[illegible]

A technical drawing of a bolt and nut assembly in perspective view. The bolt is a long, cylindrical fastener with a hexagonal head on the left and a hexagonal nut on the right. A dashed line runs through the center of the bolt, indicating its longitudinal axis. The drawing is a black and white line drawing with no shading or texture.

Acceptable Hardness:	27HRC-33HRC	Approved By:	Examined By:
Judgments:	☒ V] Conforms	Xin zheng	Zhengguo Yao
	☐] Does Not Conform		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:	1336		Date:	November, 2022	
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074		Report #:	UTP-1018-004	
Part No.:	X-111398-01	Material:	AISI 4130 75K			Coating:	/		
Description:	5-1/8"15000psi Body					Quantity:	1		
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result		
1	AP033472	RS-10-023	Acceptable						
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.									
UT Code:	ASTM A388		Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After		Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block Φ 6.4 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C		Couplant:	OIL					
Date of calibration	2022.03.02								
Period of validity	2023.03.02								
Probe Used:	2.5P Φ 14+ Φ 20		Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504		Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB Φ 6.4DAC+6dB		Level as per UT:	II		



安澜科技（江苏）股份有限公司

ANLAN TECHNOLOGY (JIANGSU) CO.,LTD

ULTRASONIC EXAMINATION REPORT

Customer:				Customer PO#:			Date:	
Drawing #:		Specification:		API Monogram:		Report #:		
Part No.:	X-111125-01	Material:	AISI 4130 75K			Coating:	/	
Description:	5-1/8"15000psi Bonnet					Quantity:	1	
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result	
1	AP033478	RS-9-072	Acceptable					
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.								
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu		
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II		
Equipment:	MUT-800C	Couplant:	OIL					
Date of calibration	2022.03.02							
Period of validity	2023.03.02							
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng		
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II		



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ULTRASONIC EXAMINATION REPORT

Customer:			Customer PO#:	1336		Date:	November, 2022
Drawing #:	PFFY105/130 AL-00	Specification:	API Spec 6A 21st /ASTM A388	API Monogram:	6A-2074	Report #:	UTP-1007-00 3
Part No.:	X-275071-01	Material:	PH17-4 105K			Coating:	/
Description:	5-1/8"15000psi Stem					Quantity:	1
Item	S/N	Heat Log No.	Result	Item	S/N	Heat Log No.	Result
1	AP033381	HY220918-2	Acceptable				
ABOVE FORGED ARE TESTED ULTRASONICALLY FOR INTERNAL DEFECTS, AND THERE WAS NO RECORDABLE INDICATION OBSERVED DURING THE TEST. HENCE ACCEPTABLE AS PER STANDARD.							
UT Code:	ASTM A388	Technique:	STRAIGHT PROBE		Examined By:	Dongkai Xu	
Exam. Stage:	Rough After	Calibration:	Block: CSK -I A Φ 1.6 FBH Block Φ 3.2 FBH Block		Level as per UT:	II	
Equipment:	MUT-800C	Couplant:	OIL				
Date of calibration	2022.03.02						
Period of validity	2023.03.02						
Probe Used:	2.5P Φ 14+ Φ 20	Acceptance Criteria:	API Spec. 6A 21st		Approved by:	Xin Zheng	
Instrmt/Ident.#:	FD14082504	Test Gain:	Φ 1.6DAC+6dB Φ 3.2DAC+6dB		Level as per UT:	II	



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