



INSPECTION CERTIFICATE
RIGID INDUSTRIES CO., LTD.

STANDARD : ASTM A234 WPB-19
 ASME SA234 WPB-21

MATERIALS : ASTM A106 Gr.B

INSP. SPEC. : ASME B16.9 -18

8. MEI-CHUNG RD. NIAO-SONG,
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DATE: 2022-09-26

ORDER NO: 306435-00

P.I. NO: 21K12-5

CERTIFI. NO: 220906-1

ACCORDING TO EN10204/DIN50049/3.1

ITEM NO.	PRODUCT & SIZE	QUANTITY PCS	MFG NO.	VISUAL & DIMENSIONAL INSPECTION	HARDNESS MAX. 197 HB	HEAT TREATMENT (NOTE)	MAGNETIC PARTICLE EXAMINATION
2	ELL 90 LR 3" XH	190	21L3152	GOOD	132-137	A	GOOD GOOD
3	ELL 90 LR 5" STD	111	21H3161	GOOD	134-139	A	
4	ELL 90 LR 5" STD	39	21L9744	GOOD	135-140	A	
5	ELL 90 LR 12" STD	60	21H8252	GOOD	139-144	A	
6	ELL 90 SR 4" STD	215	21H3674	GOOD	138-151	A	
7	CON-RED 2.1/2X2" STD	315	21H8651	GOOD	159-165	S	
8	RED-TEE 10X6" STD	3	21H4454	GOOD	133-145	S	
9	RED-TEE 10X6" STD	57	21K674H	GOOD	158-160	S	

ITEM NO.	MATERIAL CHARGE NO.		CHEMICAL COMPOSITION %											* PHYSICAL TEST					
			C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Y S	T S	*** E	**	C.E.	
			x100	x100	x100	x1000	x1000	x100	x100	x100	x100	x100	x100	x1000	KSI	KSI	%		X100
	STANDARD	MIN.		10	29														
		MAX.	30		165	50	58	40	40	40	15	8	20						50
2	11311952		13	19	76	4	2	2	2	5	2	<1	<1	46.8	67.1	32.5	L	27	
3	11309761		13	14	75	7	2	5	3	9	2	<1	<1	47.2	69.4	33.6	L	28	
4	11313544		13	17	78	11	2	3	4	7	2	<1	1	46.7	67.0	33.9	L	28	
5	21306252		13	26	109	10	3	6	3	5	<1	<1	7	45.7	66.7	31.5	T	33	
6	10304074		14	14	74	6	4	3	7	3	2	<1	<1	49.5	69.7	35.2	L	28	
7	11311951		13	19	77	12	3	2	3	10	3	<1	<1	49.9	70.0	34.8	L	29	
8	J5KA954		11	30	127	13	4	3	2	12	1	<1	<1	45.5	67.6	33.4	T	35	
9	47404H		14	16	86	15	7	1	4	3	1	1	1	47.2	67.6	32.7	T	30	

(NOTE):A:HOT FORMED WITH FINAL TEMPERATURE BETWEEN 620°C-980°C,AIR COOLING.
 N:NORMALIZING AT TEMPERATURE 880°C X0.5HR,AIR COOLING.
 S:COLD FORMED WITH STRESS RELIEF AT TEMPERATURE 650°C X0.5HR
 NACE MR0175-2015/ISO15156-1 .NACE MR0103-2015/ISO17945.SATISFACTORY
 MATERIAL IS FULLY KILLED AND FREE OF WELD REPAIRS.
 * TYPE OF SPECIMEN:STRIP(WIDTH:1 in./GAUGE LENGTH:2 in.) ** SAMPLING DIRECTION:L=LONGITUDINAL T=TRANSVERSE
 *** ACTUAL THICKNESS OF SPECIMEN(Ø) LESS THAN 5/16" E=48t±15 (L) E=32t±10 (T)
 WE HEREBY CERTIFY THAT THE PRODUCT DESCRIBED HEREIN HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS CONCERNED AND ALSO WITH THE PURCHASER'S REQUIREMENTS AND THAT THE TEST RESULTS SHOWN HEREIN ARE CORRECT.

Daniel Kung

MANAGER OF Q.A. DEPT.