

HEAT # 1421477

P.O.# 132618

HENGYANG VALIN
STEEL TUBE CO.,LTD

MILL TEST CERTIFICATE

(ACCORDING TO EN10204 3.1B)

Add: 10 Dalixincun, Hengyang City, Hunan, P.R.China P.C.:421001

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E-mail: hsecc@hysteeltube.com

CUSTOMER	BHD TUBULAR LIMITED		CERTIFICATE NO.	C201407414-1	
CONTRACT-ITEM NO.	2111001072-08	P.O.NO.	112633	DATE:	2014-3-7
PRODUCT	SEAMLESS STEEL LINE PIPE		DELIVERY CONDITION	HR	
SPECIFICATION	SEE SPECIFICATION NOTE		HEAT TREATMENT		
GRADE	B,B/X42,Grade 290		DIMENSIONS	2" x SCH80 x 20FT	
TOTAL BUNDLES:	48	TOTAL PIECES:	1748	TOTAL LENGTH:	34982.848 ft
				TOTAL WEIGHT:	79.747 mt

NO.	LOT No.	HEAT No.	BUNDLES	PIECES	LENGTH	WEIGHT	TENSILE TEST ASTM A370						COLD BENDING TEST
					ft	mt	SAMPLE TYPE/ ORIENTATION / SIZE(mm)/GAUGE LENGTH(mm):SL119/50						
						W1	TS(Psi)	YS(Psi)	Rt0.5	EL(%)	R.A. (%)	YS/TS	
1	941302707	1421479	15	548	10967.159	25.001	68295	49880		30.0		0.73	ACCEPTABLE
2	941302708	1421478	22	792	15850.346	36.132	70470	48720		30.5		0.69	ACCEPTABLE
3	941302709	1421480V	4	142	2841.868	6.524	71775	54085		32.0		0.75	ACCEPTABLE
4	941302710	1421477	7	266	5323.475	12.136	74095	53650		27.5		0.72	ACCEPTABLE

NO.	IMPACT TEST								NON METALIC INCLUSION	GRAIN SIZE	HARDNESS TEST	
	NOTCH TYPE/ORIENTATION/TEMPERATURE(°C)/SIZE (mm) :										NACE MR0175/ISO	
	///				///						15156/NACE MR0103	
	AK1 (J)	Av.(J)	% SHEAR AREA	LE	AK2 (J)	Av.(J)	% SHEAR AREA	LE			HRC	
1	/				/						11.0/11.0/11.0	
2	/				/						11.0/11.0/11.0	
3	/				/						11.0/11.0/11.0	
4	/				/						11.0/11.0/11.0	
												

NOTES:

W1--THEORETICAL WEIGHT

W2--ACTUAL WEIGHT

NR--NORMALIZING ROLLED

AK1--ABSORB ENERGY FOR THE FIRST SET

SAMPLE ORIENTATION: L--LONGITUDINAL T--TRANSVERSE

SAMPLE TYPE: S--STRIP C--CLUBBED F--FULL-SECTION

Q&T--QUENCHING AND TEMPERING

AK2--ABSORB ENERGY FOR THE SECOND SET

N--NORMALIZING

A--ANNEALING

Av.--AVERAGE

LE--SIDE EXPANSION



ORIGINAL

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TOTAL BUNDLES: 48		TOTAL PIECES: 1749		TOTAL LENGTH: 34982.848		ft	
						TOTAL WEIGHT: 79.747	
						mt	

[illegible]

NON-DESTRUCTIVE TEST				
POSITION	PIPE BODY	PIPE END	END SURFACE(GROOVE)	BEVELLING
NDT Type(Level)	ET/L4	MPI		ACCEPTABLE
LAMINAR				VISUAL & DIMENSION
TEST RESULT	ACCEPTABLE	ACCEPTABLE	N/A	ACCEPTABLE
RESIDUAL MAGNETISM		ACCEPTABLE		COATING
UT THICKNESS MEASUREMENT		N/A		
HYDROSTATIC TEST	Min(psi/s)	3000/6	ACCEPTABLE	ACCEPTABLE

NOTES:	H-HEAT ANALYSIS	P-PRODUCT ANALYSIS	CE-EQUIVALENT CARBON	R-RATIO	RI=Ca /S
	CEIHW=C+Mn/6+(Cr+Mo+V)/5+(Cu+Ni)/15	CEPCM=C+Si/30+(Mn+Cr+Cu)/20+Ni/60+Mo/15+W/10+5*B			SUM1=Cr+Cu+Mo+Ni+V
	ET-ASTM E209	UT-ASTM E213	EMI-ASTM E570	MPI-ASTM E709	
	L4/L3/L2-ACCEPT LEVEL L4/L3/L2,NOTCH DEPTH IS 12.5%/10%/5% THE SPECIFIED WALL THICKNESS.				

$$SLIM2 = Nb +$$
$$S_{U13} = N h + V + T i$$

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			TOTAL WEIGHT:	79.747	mt
		REMARK : ORIGIN:MADE IN CHINA			

SPECIFICATION NOTE	API 5L(45th)PSL1, ASTM/ASME A/SA106B, CSA Z245.1 GR290 CAT 1, NACE MR0175 MR0103, ISO15156(FOR HARDNESS ONLY)	
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正 本 ORIGINAL		Quality Manager: 唐姬娜  Certificate-maker: 唐姬娜