

P/O No. : 21248  
L/C No. :

# QUALITY CERTIFICATE



CERTIFICATE No. : 150909-200



Original certificate can be verified through QR Application.

ISSUED DATE : 2015.09.09

MANUFACTURED No. : 15-07-204

COMMODITY : E.R.W. STEEL PIPE

HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHI-DONG,  
KANGNAM-GU, SEOUL, KOREA  
DAEBUL PLANT 3RO, DAEBUL INDUSTRIAL COMPLEX, SAMHO-EUP,  
YEONGAM-GUN, JEOLLANAM-DO, KOREA

SUPPLIER : HUSTEEL CO., LTD.

SPECIFICATION : API 5L X-42 PSL-1/ASTM A53B

CUSTOMER : PLESA ANAHUAC Y CIAS., S.A. DE C.V.

NO.	HEAT_NO	QUAN-TY PCS	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT lb/ft	TENSILE TEST					CHEMICAL COMPOSITION(%)																				
					O.D	WT	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM				
					inch	inch	ft																								PSI	%	%	PSI
01	N29261	1	BPEB	20	20.000	0.500	20	104.23	T	78,317	63,959	40	82	83,103	H	6	19	101	17	2	13	10	20	TR	10	310	10							
02	N45161	2	BPEB	20	20.000	0.500	20	104.23	T	71,065	59,318	40	83	76,722	H	7	2	76	16	4	14	10	30	TR	TR	230	10							
03	N25219	1	BPEB	20	20.000	0.500	20	104.23	T	69,470	57,432	42	83	75,706	H	7	2	77	15	5	20	10	30	TR	10	260	10							

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T ( UT )	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	TP	H.T	RESULT		WZC	CST	TPI	ETL		[ 0 ] °C							
	PSI	sec		g/n <sup>2</sup>	TIMES	inch	inch	HV	DIV	Energy (Ind, J)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST			
01	1900	10	GOOD	950													
02	1900	10	GOOD	950													
03	1900	10	GOOD	950													

- Latest edition per API 5L(45th,2013) ASTM(2012)  
- HARDNESS MAX 22 HRC AS PER NACE MR 0175

**ORIGINAL**

\*1. Type of Pipe Ends  

BPE	Black Plain Ends	GPE	Galvanized Plain Ends
BPEB	BPE Bevelled	GPEB	GPE Bevelled
BTE	Black Threaded Ends	GTE	Galvanized Threaded Ends
BTC	Black Threaded & Coupled	GTC	Galvanized Threaded & Coupled

\*2. O.D : Outside Diameter, WT : Wall Thickness  
\*3. Direction- L : Longitudinal, T : Transverse  
\*4. Tensile Test -TS : Tensile Strength, VS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, Y.P method : 0.5% Underload  
\*5. H : Heat analysis, P : Product analysis \*6. -2 : x1/100, -3 : x1/1000, -4 : x1/10000, -5 : x1/100000, Tr : Trace \*7. B : Base Metal, W : Weld Line, H : Heat Affected Zone  
\*8. Specimen Size -A:10x10mm, B:10x7.5mm, C:10x6.6mm, D:10x5.0mm, Direction: Transverse \*9. T.P : Testing Pressure, H.T : Holding Time \*10. Heat Treatment Seam Normalizing  
\*11. WZC : Weight of Zinc Coating, CST : Copper Sulphate Test \*12. TPI : Threads per inch, ETL : Effective length of threads \*13. NDT : UT, Reference Standard 3.2.C Drilled Hole

WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH THE ORDER AND ABOVE SPECIFICATION  
THIS CERTIFICATE IS ISSUED ACCORDING TO EN 10204 3.1(ISO 10474 3.1 B)

SURVEYOR

MANAGER OF QA TEAM