

COPY

P/O No. : 19326  
 L/C No. : M931697

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ISSUED DATE : 2014.12.23

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COMMODITY : E.R.W. STEEL PIPE

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SPECIFICATION : API 5L X-42 PSL1/ASTM A53B

# QUALITY CERTIFICATE



HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHE-DONG,  
 KANGNAM-GU, SEOUL, KOREA

DANGJIN PLANT 131,BUGOKGONGDAN STREET, SONGAK-EUP,  
 DANGJIN-SI, CHUNGCHEONGNAM-DO, KOREA

CERTIFICATE No. : 141223-A931

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MANUFACTURED No. : 14-11-010-0

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SUPPLIER : HUSTEEL CO., LTD.

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



NO.	HEAT_NO	QUAN- TITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	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									lb/ft	PSI	%	%	PSI	-2			-3			-4			-5	-3			
01	N01861	70	BPEB	10	10.750	0.225	20	25.29	T	66,279	55,692	37	84	70,485	H	6	1	73	14	6	11	10	20	0	10	140	10							
	N31221	169	BPEB	10	10.750	0.225	20	25.29	T	67,730	57,142	35	84	71,936	P	6	1	75	14	7	12	9	22	14	16	138	10							
02	105622	153	BPEB	10	10.750	0.365	20	40.52	T	73,676	54,967	36	75	77,882	H	7	1	74	11	6	23	10	20	0	0	140	10							
															P	7	2	75	11	4	23	10	20	14	15	148	8							
															P	7	2	75	10	4	23	11	20	15	16	138	10							
															H	17	1	84	15	2	10	10	10	20	10	10	10							
															P	17	2	85	13	1	10	11	10	20	13	10	6							
															P	17	2	85	13	2	10	12	14	20	12	10	7							

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST			*13 N · D · T ( UT Or ECT )	FLATTENING OR BEND TEST	VISUAL & DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		( 0 ) °C							
	PSI	sec		g/m <sup>2</sup>	TIMES		mm	HV	DIV	Energy (Ind, J)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST			
	*9			*10	*11	*12			*7		*8						
01	1057	5	GOOD	900													
	1057	5	GOOD	900													
02	2420	5	GOOD	900													

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

**N O T E**

<p>*1. Type of Pipe Ends</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>BPE</td> <td>Black Plain Ends</td> <td>GPE</td> <td>Galvanized Plain Ends</td> </tr> <tr> <td>BPEB</td> <td>BPE Bevelled</td> <td>GPEB</td> <td>GPE Bevelled</td> </tr> <tr> <td>BTE</td> <td>Black Threaded Ends</td> <td>GTE</td> <td>Galvanized Threaded Ends</td> </tr> <tr> <td>BTC</td> <td>Black Threaded &amp; Coupled</td> <td>GTC</td> <td>Galvanized Threaded &amp; Coupled</td> </tr> </table>	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	<p>*2. O.D : Outside Diameter, W.T : Wall Thickness</p> <p>*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, Y.P method : 0.5% Underload</p> <p>*5. H : Heat analysis, P : Product analysis</p> <p>*8. Specimen Size -A:10x10mm, B:10x7.5mm, C:10x6.6mm, D:10x5.0mm, Direction: Transverse</p> <p>*11. WZC : Weight of Zinc Coating, CST : Copper Sulphate Test</p>	<p>*3. Direction- L : Longitudinal, T : Transverse</p> <p>*6. -2 : x1/100, -3 : x1/1000, -4 : x1/10000, -5 : x1/100000, Tr : Trace</p> <p>*9. T.P : Testing Pressure, H.T : Holding Time</p> <p>*12. TPI : Threads per inch, ETL : Effective length of threads</p> <p>*13. NDT : UT Or ECT,</p>
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															

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)

MANAGER OF Q.A TEAM

