

COPY

P/O No. : 19371 L/C No. : M934647	QUALITY CERTIFICATE 주식회사 휴스틸 HUSTEEL Co., Ltd.	CERTIFICATE No. : 151015 MANUFACTURED No. : 14-11-107
ISSUED DATE : 2015.03.19	HEAD OFFICE SHINAN B/D 15F, 943-19, DAECHI-DONG, KANGNAM-GU, SEOUL, KOREA	SUPPLIER : HUSTEEL CO., LTD.
COMMODITY : E.R.W. STEEL PIPE	DAEBUL PLANT 3RO, DAEBUL INDUSTRIAL COMPLEX, SAMHO-EUP, YEONGAM-GUN, JEOLLANAM-DO, KOREA	CUSTOMER : PLESA ANAHUAC Y CLAS S.A. DE. C.V.
SPECIFICATION : API 5L X-42 PSL1/ASTM A53B		



Original certificate can be verified through QR Application.

NO.	HEAT_NO	QUANTITY	TYPE	NOMINAL SIZE	ORDER SIZE			WEIGHT	TENSILE TEST					CHEMICAL COMPOSITION(%)																
					Q.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					
04	N60240	10	BPEB	12 3/4	12.750	0.250	20	33.41	T	68,745	54,242	37	79	70,485	H	6	1	78	14	5	11	10	20	TR	TR	140	10			
05	N25625	58	BPEB	12 3/4	12.750	0.250	20	33.41	T	68,165	53,662	39	79	70,775	H	6	1	78	14	5	12	6	27	10	12	193	7			
06	N53138	2	BPEB	14	14.000	0.250	20	36.75	T	68,455	55,692	40	81	72,661	H	6	1	77	14	6	10	5	21	10	11	165	7			

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
	T.P	H.T	RESULT		WZC	CST	TPI	ETL		(0) °C						
	PSI	sec			g/m ²	TIMES	inch	HV		DIV	Energy (Ind. J)					
04	1410	5	GOOD	930												
05	1410	5	GOOD	930												
06	1280	5	GOOD	930												

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

NOTE

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction - L : Longitudinal, T : Transverse																
<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 Beveled</td> <td>GPEB</td> <td>GPE Beveled</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 & Coupled</td> <td>GTC</td> <td>Galvanized Threaded & Coupled</td> </tr> </table>	BPE	Black Plain Ends	GPE	Galvanized Plain Ends	BPEB	BPE Beveled	GPEB	GPE Beveled	BTE	Black Threaded Ends	GTE	Galvanized Threaded Ends	BTC	Black Threaded & Coupled	GTC	Galvanized Threaded & Coupled	*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	*5. H : Heat analysis, P : Product analysis
BPE	Black Plain Ends	GPE	Galvanized Plain Ends															
BPEB	BPE Beveled	GPEB	GPE Beveled															
BTE	Black Threaded Ends	GTE	Galvanized Threaded Ends															
BTC	Black Threaded & Coupled	GTC	Galvanized Threaded & Coupled															
	*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. LP : 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																

SURVEYOR	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 QA TEAM
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