

QUALITY CERTIFICATE

P/O No. : 22479
L/C No. : M933684



CERTIFICATE No. : 160219-046



ISSUED DATE : 2016.02.19

MANUFACTURED No. : 15-12-225

COMMODITY : E.R.W SQUARE STEEL PIPE

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

SUPPLIER : HUSTEEL CO., LTD.

SPECIFICATION : ASTM A500 GRADE-B

DAEBUL PLANT : 3RO, DAEBUL INDUSTRIAL COMPLEX, SAMHO-EUP,
YEONGAM-GUN, JEOLLANAM-DO, KOREA

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

Original certificate
can be verified through
QR Application.

NO.	HEAT_NO	QUAN-TITY	TYPE	ORDER SIZE			WEIGHT	TENSILE TEST					CHEMICAL COMPOSITION(%)																																
				SIDE LENGTH	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	MPa	%	%	MPa	-2			-3			-4			-5	-3
				*1		*2																								*3		*4		*5		*6									
01	N73405	58	BPE	16"X16"	0.375	40	78.33	L	463	344	24	74	P	16	1	48	16	5	15																										
02	N71787	15	BPE	16"X16"	0.375	40	78.33	L	486	392	34	81	P	18	1	48	16	5	15																										
03	N73405	82	BPE	16"X16"	0.500	40	103.31	L	494	417	33	84	P	15	1	46	14	4	16																										
04	N73410	55	BPE	16"X16"	0.625	40	127.58	L	491	418	39	85	P	16	1	46	14	4	17																										
05	N70422	8	BPE	16"X16"	0.625	40	127.58	L	495	432	40	87	P	16	1	52	16	5	16																										

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		DIV	J (AVE)	SIZE					
	MPa	sec			g/m ²	TIMES											
	*9				*10	*11	*12	HV		*6							
01																	
02																	
03																	
04																	
05																	

Latest edition per ASTM(2012)

N O T E

*1. Type of Pipe Ends	*2. O.D : Outside Diameter, W.T : Wall Thickness	*3. Direction- L : Longitudinal, T : Transverse																
<table border="1"> <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 & Coupled</td> <td>GTC</td> <td>Galvanized Threaded & 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	*4. Tensile Test -TS : Tensile Strength, YS : Yield Strength, YR : Yield Ratio, EL : Elongation, WTS : Weld tensile strength, Gauge Length : 2 inch, YP method : 0.5% Underload	*5. H : Heat analysis, P : Product analysis
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															
	*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																
	*11. W.ZC : Weight of Zinc Coating, C.S.T : Copper Sulphate Test	*12. T.P.I : Threads per inch, E.T.L : Effective length of threads																
		*13. N.D.T : UT, Reference Standard 3.2 C Drilled Hole																

SURVEYOR	WE HERYBY 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)	 MANAGER OF Q.A TEAM
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