QUALITY CERTIFICATE

주식회사 휴스틸
HUSTEEL Co., Ltd.

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

ISSUED DATE : 2016.03.03

COMMODITY : E.R.W SQUARE STEEL PIPE

SPECIFICATION : ASTM A500 GRADE-B

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

CERTIFICATE No. : 160303-061

MANUFACTURED No. : 15-12-225

SUPPLIER : HUSTEEL CO., LTD.

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

HUSTEEL
Original certificate can be verified through QReal Application.

NO.	HEAT_NO	QUAN-TITY	TYPE	ORDER SIZE			WEIGHT	TENSILE TEST						CHEMICAL COMPOSITION(%)															
				SIDE LENGTH	W.T	LENGTH		DIR.	TS	YS	EL	YR	WTS	DIV	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	CEQ	PCM
		PCS		inch	inch	ft	lb/ft		PSI		%	%	PSI		-2			-3					-4				-5	-3	
			*1	*2				*3	*4					*5	*6														
01	N73430	35	BPE	14"X14"	0.312	40	57.11	L	71,936	63,089	36	88		P	17	1	47	13	6	14									
02	N73430	68	BPE	14"X14"	0.375	40	68.15	L	71,501	61,058	33	85		P	16	1	46	13	6	14									
03	N73430	30	BPE	14"X14"	0.500	40	89.70	L	63,234	52,936	40	84		P	15	1	47	13	7	14									
04	M83384	14	BPE	14"X14"	0.500	40	89.70	L	68,020	54,242	37	80		P	16	2	50	14	5	18									

NO.	HYDROSTATIC TEST			HEAT TREATMENT	ZINC COATING TEST		THREADS		HARDNESS TEST	IMPACT TEST (0) ℃			*13 N・D・T (UT)	FLATTENING OR BEND TEST	VISUAL& DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
	T.P	H.T	RESULT		WZC	CST	TPI	ETL							GOOD		
	MPa	sec		℃	g/㎡	TIMES		mm	HV	DIV	J (AVE)	SIZE	FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		
	*9			*10	*11		*12			*7		*8					
01																	
02																	
03																	
04																	

Latest edition per ASTM(2012)

ORIGINAL

NOTE

*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	BlackThreaded & Coupled	GTC	Galvanized Threaded& Coupled

* 2. **O.D** : Outside Diameter, **W.T** : Wall Thickness
*3. Direction- **L** : Longitudinal, **T** : Transverse
* 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
* 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 ¢ 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)

Chief Stamp 1/no

MANAGER OF Q.A TEAM

본 검사증명서에 명기된 규격용도 외 사용시 안전상 문제가 발생할 수 있으며, 검사증명서 위・변조시 사문서 위조(형법231조)로 불이익을 당하실 수 있습니다.

HUSTEEL