ORIGINAL

CERTIFICATE OF QUALITY

주식회사 휴스틸
HUSTEEL Co., Ltd.

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

P/O No. : 16297
L/C No. : M929915
발 급 일 자 ISSUED DATE : 2013.11.11
제 품 명 COMMODITY : E.R.W. STEEL PIPE
제 품 규 격 SPECIFICATION : ASTM A500 GRADE-B

증명서번호 CERTIFICATE No. : 131111-343
제 조 번 호 MANUFACTURED No. : 2013-10-209
공 급 자 SUPPLIER : HUSTEEL CO., LTD.
수 요 가 CUSTOMER : PLESA ANAHUAC Y CLAS., S.A. DE C.V

NO.	HEAT_NO	수량 QUAN-TITY	관종 TYPE	주문치수 ORDER SIZE			중량 WEIGHT	인장시험 TENSILE TEST						화학성분 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	*1	inch	inch	ft	kg/ft	*3	PSI		%	%	PSI	*5	-2			-3					-4				-5	-3	
				*2					*4						*6														
01	M85112	11	BPE	12"X12"	0.500	40	34.51	L	67,150	47,135	25	70		H	16	1	50	15	4										
														P	15	1	52	14	4	13									
														P	15	1	51	15	3	13									
02	M85906	42	BPE	12"X12"	0.500	40	34.51	L	67,585	48,295	29	71		H	17	1	48	12	5										
														P	16	1	49	11	4	16									
														P	16	2	49	12	4	17									

NO.	HYDROSTATIC TEST T.P	H.T	RESULT	HEAT TREATMENT	ZINC COATING TEST WZC	CST	THREADS TPI	ETL	HARDNESS TEST	IMPACT TEST (0) ℃ DIV	J (AVE)	SIZE
	MPa	sec		℃	g/m'	TIMES		mm	HV	*7		*8
	*9			*10	*11		*12					
01												
02												

*13 N · D · T (UT)	FLATTENING OR BEND TEST	VISUAL& DIMENSION	METALLOGRAPHIC TEST	RESIDUAL MAGNETISM
GOOD	GOOD	GOOD		
FLANGE TEST	REVERSE FLATTENING TEST	CRUSH TEST		

Latest edition per ASTM(2010)

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 : Outsid 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 : x1/10000, 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

본 제품은 관련 규격이 정한 시험 및 검사에 합격하였음을 증명합니다.
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 B)

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.