

ORIGINAL

QUALITY CERTIFICATE

주식회사 휴스틸
(HUSTEEL CO.,LTD.)

계약서번호 : P/O No. : 12691
 발급일자 : L/C No. :
 ISSUED DATE : 2012. 07. 25.
 제품명 :
 COMMODITY : E.R.W. STEEL PIPES
 제품규격 :
 SPECIFICATION : API 5LB / ASTM A53B

HEAD OFFICE : Shinan B/D 15F, 943-19, Daechi-dong
 Kangnam-ku, SEOUL 135-845, KOREA
 DANGJIN PLANT: 569-1,BUGOK-RI,SONGAK-MYEON, DANGJIN-GUN,
 CHUNGCHEONGNAM-DO,KOREA
 DAEBUL PLANT: 150,DAEBULSANDAN3-RO, YOUNGAM-GUN
 JOLLANAM-DO, KOREA

증명서번호 : CERTIFICATE No. : 20120725-236
 제조번호 :
 MANUFACTURED No.: 2012-06-204
 공급자 :
 SUPPLIER : HUSTEEL CO.,LTD.
 수요가 : PLESA ANAHUAC Y CIAS.,
 CUSTOMER : S.A. DE C.V.

ITEM NO.	HEAT NO. (LOT)	관종 TYPE	수량 QUANTITY (PIECES)	호칭경 NOMINAL SIZE (inch)	주문치수 ORDER SIZE			중량 WEIGHT (lb/ft)	인장시험 TENSILE TEST				화학성분 CHEMICAL COMPOSITION(%)														
					바깥지름 O.D (mm)	두께 W.T. (in)	길이 LENGTH (ft)		인장강도 TS (psi)	항복강도 YS (psi)	연신율 EL (%)	항복비 YR (YS/TS)	C	Si	Mn	P	S	Cu	Cr	Ni	Mo	V	Nb	Ti	B	PCM	CEQ
					②	③			(psi)	(psi)	(%)	(YS/TS)	-2	-3	-2	-3			-4			-3					
1	389345	BPEB	552	10 3/4	273.1	0.250	20'	28.04	71791	49746	36		17	17	82	17	4	6	15	3	14	5	20	5	1		
2	389395	BPEB		10 3/4	273.1	0.250	20'	28.04	67585	48150	40		11	9	84	14	1	1	18	1	1	5	23	3	1		
3	M51962	BPEB		10 3/4	273.1	0.250	20'	28.04	68600	58013	37		8	9	84	12	6	16	19	5	4	4	150	5	1		
4	M51973	BPEB		10 3/4	273.1	0.250	20'	28.04	78027	52936	25		8	22	80	11	3	14	23	6	2	5	199	5	1		
5	M52855	BPEB		10 3/4	273.1	0.250	20'	28.04	67005	55692	38		7	10	81	12	5	17	20	6	4	7	160	5	1		
6	SQ70188	BPEB		10 3/4	273.1	0.250	20'	28.04	67440	52501	37		16	19	65	8	3	10	10	4	2	4	11	4	1		

ITEM NO.	수압시험 HYDROSTATIC TEST		열처리온도 HEAT TREATMENT (°C)	비파괴 시험 NDT (U.T)	경도시험 HARDNESS TEST (HV)	외주장 CIRCUMFERENCE		용접부인장강도 TENSILE STRENGTH OF WELDS (psi)	아연도금시험 ZINC COATING TEST		VISUAL & DIMENSION	FLATTENING (BEND) TEST	W D T	R G T	M G T	S.T (%)	충격시험 IMPACT TEST		Res. Mag.	비고 REMARKS
	TP (psi)	RE-SULT				END	BODY		WZC (g/m²)	CST (TIMES)							P	ENERGY(J) SIZE: ⑩		
	⑤								⑦								⑧	⑨		
1	1000	GOOD	930	ACCEPT				75852			ACCEPT	GOOD							16	①Latest edition per 5LB(44th,2008)/ ASTM A53B(2007)/ ②HARDNESS MAX. 22 HRC AS PER NACE MR 0175
2	1000	GOOD	930	ACCEPT				71646			ACCEPT	GOOD							17	
3	1000	GOOD	930	ACCEPT				72661			ACCEPT	GOOD							16	
4	1000	GOOD	930	ACCEPT				82088			ACCEPT	GOOD							16	
5	1000	GOOD	930	ACCEPT				71066			ACCEPT	GOOD							17	
6	1000	GOOD	930	ACCEPT				71501			ACCEPT	GOOD							16	

N ①TYPE BPE BLACK PLAIN ENDS BPEB BPE BEVELLED BTE BLACK THREADED ENDS BTC BLACK THREADED & COUPLED GPE GALVANIZED PLAIN ENDS GTE GALVANIZED THREADED ENDS GTC GALVANIZED THREAD & COUPLED
 O ②O.D. OUTSIDE DIAMETER ③W.T. WALL THICKNESS ④CHEMICAL COMPOSITION CHECK-ANALYSIS/UNIT -2:1/×100 -3:1/×1000 -4:1/×10000 TR TRACE ⑤TP TESTING PRESSURE ⑥NDT NON-DESTRUCTIVE TEST
 T E.T EDDY CURRENT TEST U.T ULTRASONIC TEST ⑦WZC WEIGHT OF ZINC COATING CST COPPER SULPHATE TEST ⑧WDT WELD DUCTILITY TEST RGT RING GAGE TEST MGT METALLOGRAPHIC TEST ⑨S.T STRAIGHTNESS
 E ⑩P=Position B:Base Metal, CL:Center Line ⑪SPECIMEN SIZE, A:10x10mm, B:10x7.5mm, C:10x6.7mm, D:10x5.0mm, ⑫RES.MAG. : RESIDUAL MAGNITISM

SIGNATURE: _____
 WE HEREBY CERTIFY THAT THE PRODUCTS HEREIN HAVE BEEN MADE AND TESTED IN ACCORDANCE WITH THE ABOVE SPECIFICATION AND ALSO WITH THE REQUIREMENTS CALLED FOR THE ORDER.
 SIGNATURE: *[Signature]*
 MANAGER OF QUALITY ASSURANCE TEAM