MILL'S QUALITY CERTIFICATE

SeAH Steel Corp.
(주)세 아 제 강

HEAD OFFICE ; BONGNAE-DONG 1GA, JUNG-GU, SEOUL, KOREA
POHANG PLANT ; 14-1, JANGHEUNG-DONG, NAM-GU, POHANG

증명서번호 / CERTIFICATE NO. : E200704-0086-001171(5001422)
제 품 명 / COMMODITY : E.R.W STEEL PIPE
제 품 규 격 / SPECIFICATION : API 5LB PSL1/ASTM A53B(2005)

발 급 일 자 / DATE OF ISSUE : 2007.03.30
계 약 서 번 호 / L/C No. (P/O No.) : 47LI-B82946-TLJY(1103049204)
수 요 가 / CUSTOMER : DUFERCO SA
주 문 자 / SHIPPER : SEAH STEEL CORPORATION

NO.	HEAT NO. (BATCH NO.)	관 단 TYPE *1	주 문 치 수 ORDER SIZE			수 량 QUANTITY 본 수 PCS	총 길 이 TOTAL LENGTH	중량(M/T) WEIGHT	비 고 REMARK
9	SB60953 (SHH2071010)	BBE	10 "	X 0.500 "	X 6.120 M	53	324.360 M	26.452	* DESCRIPTIION OF GOODS : 1,408.552MT (+/- 10 PCT) CARBON STEEL PIPES WELDED / ASTM A53 B
10	SP73826 (SHH2121010)	BBE	18 "	X 0.250 "	X 6.120 M	35	214.200 M	15.233	* STEEL GRADE : ASTM A53 B
11	SP73958 (SHH2121060)	BBE	18 "	X 0.250 "	X 6.120 M	7	42.840 M	3.047	
12	C720266 (SHH2122040)	BBE	18 "	X 0.375 "	X 6.120 M	21	128.520 M	13.474	

NO.	HEAT NO (BATCH NO.)	HYDROSTATIC TEST 10 Sec. psi	RESULT	N·D·T U *2	VISUAL & DIMENSION	FLATTENING	SHOCK	COMPRESSION	RESIDUAL MAGNETISM GAUSS	BENDING *3	DRIFT	CRUSH	FLARING	FLANGE	REVERSE FLATTENING
기준 SPEC									30						
9	SB60953 (SHH2071010)	1950	G	G	G	G			G						
10	SP73826 (SHH2121010)	580	G	G	G	G			G						
11	SP73958 (SHH2121060)	580	G	G	G	G			G						
12	C720266 (SHH2122040)	880	G	G	G	G			G						

NO.	HEAT NO (BATCH NO.)	ZINC COATING TEST WEIGHT OF ZINC COAT -ING	균일성 C.S *4	알칼리 ALK *5	DESIG *6	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ *8	DIR *9	TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	IMPACT TEST (℃) ENERGY Joule	SHEAR AREA %	HARDNESS TEST	HEAT TREAT MENT SN *11	PROTECTIVE COATING & LINING THICKNESS	P.H
						2			3		2	2	2	2	3											
						*7										*8	*9									
기준 SPEC					MAX	26		120	30	30	40	40	40	15	80											
					MIN													60000	35000							
9	SB60953 (SHH2071010)				H	17	1	75	12	9																
					P	17	1	76	14	9	1	1	1	TR	TR		T	72250	45370	42				G		
					P	16	1	76	12	10	1	1	1	TR	TR		W	71543								
10	SP73826 (SHH2121010)				H	13	1	67	15	7																
					P	13	2	67	15	5	1	1	1	TR	TR		T	65850	42950	42				G		
					P	14	2	68	13	9	TR	1	2	TR	TR		W	66992								
11	SP73958 (SHH2121060)				H	14	TR	63	12	5																
					P	13	1	63	10	4	1	1	1	TR	1		T	66700	44370	41				G		
					P	14	TR	63	13	5	2	1	1	TR	TR		W	66139								
12	C720266 (SHH2122040)				H	18	2	84	14	7																
					P	18	3	84	15	6	2	2	2	1	1		T	72530	50920	47				G		
					P	19	1	83	12	6	2	2	2	1	1		W	73108								

NOTE *1 ~ *12 : Refer To The Attached Section Designation

OTHER

Surveyor :

· WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATION AND THE RESULTS OF ALL TEST ARE ACCEPTABLE.
· THE USE OF THE MATERIAL OUTSIDE THE SPECIFICATIONS INDICATED ON THIS CERTIFICATE MAY CAUSE SAFETY AND/OR MONETARY PROBLEMS. FURTHERMORE, ANY ORGANIZATION OR PERSON(S) WHO DELIBERATELY MODIFIES THE CERTIFICATE WILL BE PROSECUTED FOR FORGING AN OFFICIAL DOCUMENT (ACCORDING TO THE PROVISIONS OF THE CRIMINAL CODE 231)

Manager of Q.M Dept.

J. E. KIM

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