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-001171(5001422)

PIPE

/ASTM A53B(2005)

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

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

주문치수 ORDER SIZE	수량 QUANTITY 본수 PCS	총길이 TOTAL LENGTH	중량(M/T) WEIGHT	비고 REMARK
12 " X 0.406 " X 6.120 M	37	226.440 M	18.036	* DESCRIPTIION OF GOODS : 1,408.552MT (+/- 10 PCT) CARBON STEEL PIPES WELDED / ASTM A53 B
14 " X 0.438 " X 6.120 M	82	501.840 M	47.324	* STEEL GRADE : ASTM A53 B
14 " X 0.500 " X 6.120 M	58	354.960 M	38.119	
12 " X 0.250 " X 6.120 M	68	416.160 M	20.854	

N·D·T U *2	VISUAL &	DIMENSION	FLATTENING	SHOCK	COMPRESSION	RESIDUAL MAGNETISM GAUSS	BENDING *3	DRIFT	CRUSH	FLARING	FLANGE	REVERSE FLATTENING	ZINC COATING TEST WEIGHT OF ZINC COAT-ING	균일성 C.S *4	알칼리 ALK *5	DESIG *6	CHEMICAL COMPOSITION(%) C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ *8	DIR *9	TENSILE TEST (Gage Length : 50mm) TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	IMPACT TEST (℃) ENE-RGY Joule	SHEAR AREA %	HARD-NESS TEST	HEAT TREAT MENT SN *11	PROTECTIVE COATING & LINING THICK-NESS	P.H
						30										MAX	26		120	30	30	40	40	40	15	80											
																MIN													60000	35000							
G	G	G				G										H	17	2	86	16	7																
																P	16	2	86	17	7	1	1	1	TR	1		T	74380	49350	40				G		
																P	18	2	86	18	9	TR	1	2	TR	1		W	74957								
G	G	G				G										H	16	18	44	20	4																
																P	15	17	43	21	4	1	1	1	1	1		T	68840	49490	44				G		
																P	15	18	43	18	2	1	1	1	1	1		W	69694								
G	G	G				G										H	17	1	77	14	9																
																P	16	2	76	16	8	TR	1	1	TR	1		T	73100	49070	39				G		
																P	16	TR	78	13	8	TR	1	1	1	1		W	73819								
G	G	G				G										H	16	1	64	13	6																
																P	17	TR	65	14	8	1	1	1	TR	1		T	74670	52620	31				G		
																P	15	TR	65	13	5	1	1	1	TR	1		W	73535								

COPY

OTHER

- 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

주식회사세아제강 포항공장품질경영팀장 SeAH