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.: E200605-0339-000452(5000078)
제 품 명 COMMODITY : E.R.W STEEL PIPE
제 품 규 격 SPECIFICATION : ASTM A500 B(2003A)

발 급 일 자 DATE OF ISSUE : 2006.05.29
계 약 서 번 호 L/C No. (P/O No.) : 04980PSILC05387
수 요 가 CUSTOMER : DUFERCO SA
주 문 자 SHIPPER : SEAH STEEL CORP

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
0	SP47319 (E162005205)	BME	14" X 14" X 0.500 " X 40.000 FT	13	520.000 FT	21.153	
0	C610973 (E162005206)	BME	16" X 16" X 0.375 " X 40.000 FT	15	600.000 FT	21.384	
0	C425513 (E162005207)	BME	16" X 16" X 0.500 " X 40.000 FT	17	680.000 FT	31.862	

NO.	HEAT NO (BATCH NO.)	HYDROSTATIC TEST Sec.	HYDROSTATIC TEST RESULT	N·D·T *2	VISUAL & DIMENSION	FLATTENING	SHOCK	COMPRESSION	RESIDUAL MAGNETISM GAUSS	BENDING *3	DRIFT	CRUSH	FLARING	FLANGE	REVERSE FLATTENING
기준 SPEC															
0	SP47319 (E162005205)				G										
0	C610973 (E162005206)				G										
0	C425513 (E162005207)				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	CEQ *8	DIR *9	TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	IMPACT TEST (℃) ENERGY Joule	SHEAR AREA %	HARDNESS TEST	HEAT TREATMENT *11	PROTECTIVE COATING & LINING THICKNESS	P.H
						2			3												
						*7															
기준 SPEC					MAX	.30			.45	.45											
					MIN								58030	45940	23						
0	SP47319 (E162005205)				H P	18	1	79	13	8		L	67130	46930	35.2						
0	C610973 (E162005206)				H P	16	2	77	14	10		L	68980	49490	29.9						
0	C425513 (E162005207)				H P	16	17	59	21	12		L	74240	54040	29.4						

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