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. : E200701-0393-000393(5000987)
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 : 2007.01.19
계 약 서 번 호 L/C No. (P/O No.) : 1103044853
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
21	SB62790 (SHH1081050)	BME	ø 16" X 8" X 0.375 " X 40.000 FT	24	960.000 FT	25.315	
22	310167A (SHH1091010)	BME	ø 16" X 16" X 0.500 " X 40.000 FT	7	280.000 FT	13.120	
23	310183B (SHH1091020)	BME	ø 16" X 16" X 0.500 " X 40.000 FT	12	480.000 FT	22.491	
24	110890A (SHH1091040)	BME	ø 16" X 16" X 0.500 " X 40.000 FT	13	520.000 FT	24.365	

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	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	IMPACT TEST (℃) SHEAR AREA %	HARDNESS TEST	HEAT TREATMENT *11	PROTECTIVE COATING & LINING THICKNESS	PROTECTIVE COATING & LINING P.H
																				CHEMICAL COMPOSITION(%)																									
																				2				3																				
기준 SPEC																			MAX	30			45	45			58000	46000	23							
																			MIN																								
21	SB62790 (SHH1081050)				G														H	18	1	79	16	5																		
																			P	19	1	81	18	4		L	77510	51630	26							
																			P	17	TR	80	15	4																		
22	310167A (SHH1091010)				G														H	19	9	21	8	8																		
																			P	18	10	20	7	7		L	66700	48660	35							
																			P	19	10	21	10	10																		
23	310183B (SHH1091020)				G														H	17	8	23	20	5																		
																			P	16	9	23	19	4		L	65280	49070	33.5							
																			P	18	7	22	20	7																		
24	110890A (SHH1091040)				G														H	20	4	23	15	7																		
																			P	20	5	23	17	8		L	68130	50920	35							
																			P	19	4	24	17	6																		

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