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
5	C624585 (SHGX041120)	BME	16" X 16" X 0.375 " X 40.000 FT	20	800.000 FT	28.512	
6	SP70542 (SHH1031010)	BME	14" X 14" X 0.375 " X 40.000 FT	16	640.000 FT	19.846	
7	SP70542 (SHH1032010)	BME	14" X 14" X 0.375 " X 40.000 FT	20	800.000 FT	24.808	50.856
8	SP66354 (SHH1032030)	BME	14" X 14" X 0.375 " X 40.000 FT	5	200.000 FT	6.202	

COPY

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
기준 SPEC																		
5	C624585 (SHGX041120)				G													
6	SP70542 (SHH1031010)				G													
7	SP70542 (SHH1032010)				G													
8	SP66354 (SHH1032030)				G													

NO.	HEAT NO (BATCH NO.)	DESIG *6	C	Si	Mn	P	S						CEQ *8	DIR *9	TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	ENERGY Joule	SHEAR AREA %	HARDNESS TEST	HEAT TREAT MENT *11	PROTECTIVE COATING & LINING THICKNESS	P.H
			2			3																	
기준 SPEC		MAX	30			45	45								58000	46000	23						
		MIN																					
5	C624585 (SHGX041120)	H	17	2	76	23	12																
		P	17	2	77	24	11							L	75520	56040	28						
6	SP70542 (SHH1031010)	P	16	2	77	22	11																
		H	18	1	81	11	5																
		P	17	2	82	13	5							L	72530	48500	29						
7	SP70542 (SHH1032010)	P	18	2	80	12	4																
		H	18	1	81	11	5																
		P	19	2	82	13	4							L	73250	48210	27						
8	SP66354 (SHH1032030)	P	19	2	82	13	5																
		H	17	TR	76	12	7																
		P	17	1	75	13	9							L	74810	49630	26						
		P	16	1	76	14	9																

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

주식회사세아제강 포항강관품질경영팀장 SeAH