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.: E200706-0020-001526(5001625)
제 품 명 COMMODITY : E.R.W STEEL PIPE
제 품 규 격 SPECIFICATION : API 5LB PSL1/ASTM A53B(2006)

발 급 일 자 DATE OF ISSUE : 2007.04.30
계 약 서 번 호 L/C No. (P/O No.) : 47LI-B93402-TMA4
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
13	5-37741 (SHH3191020)	BBE	14 "	X 0.500 "	X 6.120 M	39	238.680 M	25.632	
14	C711048 (SHH3221020)	BBE	12 "	X 0.250 "	X 6.120 M	63	385.560 M	19.320	
15	C730921 (SHH3221030)	BBE	12 "	X 0.250 "	X 6.120 M	248	1,517.760 M	76.055	

NO.	HEAT NO (BATCH NO.)	HYDROSTATIC TEST 5 Sec. psi	RESULT	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
기준 SPEC									30									
13	5-37741 (SHH3191020)	1500	G	G	G	G			G									
14	C711048 (SHH3221020)	820	G	G	G	G			G									
15	C730921 (SHH3221030)	820	G	G	G	G			G									

NO.	HEAT NO (BATCH NO.)	DESIG *6	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ	DIR *9	TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	ENERGY Joule	SHEAR AREA %	HARDNESS TEST	HEAT TREATMENT SN *11	THICKNESS	P.H
			2			3		2	2	2	2	3	*8										
기준 SPEC		MAX	26		120	30	30	40	40	40	15	80											
		MIN													60000	35000							
13	5-37741 (SHH3191020)	H	16	17	44	16	5																
		P	17	16	44	14	4	1	2	1	1	1		T	67410	47500	48				G		
		P	16	17	44	15	6	1	1	1	1	2		W	69837								
14	C711048 (SHH3221020)	H	18	2	78	17	8																
		P	17	1	77	15	6	2	1	2	1	1		T	73250	54470	42				G		
		P	17	1	77	15	8	1	2	1	1	1		W	74388								
15	C730921 (SHH3221030)	H	15	2	77	17	7																
		P	14	2	77	17	6	1	1	1	1	1		T	74670	56180	44				G		
		P	16	1	76	17	8	1	1	1	1	1		W	74388								
		P												T	74240	55040	44						
		P												W	74673								

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

(주)세아제강 SeAH 품질경영팀장