MILL'S QUALITY CERTIFICATE

SeAH 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
35	SB67368 (SIH3301110)	BBE	16 " X 0.250 " X 6.120 M	63	385.560 M	24.340	
36	SB67595 (SIH3302020)	BBE	16 " X 0.312 " X 6.120 M	101	618.120 M	47.985	
37	C710601 (SIH3302030)	BBE	16 " X 0.312 " X 6.120 M	5	30.600 M	2.375	
38	5-38474 (SIH4022060)	BBE	18 " X 0.375 " X 6.120 M	64	391.680 M	41.063	

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									
35	SB67368 (SIH3301110)	660	G	G	G	G			G									
36	SB67595 (SIH3302020)	820	G	G	G	G			G									
37	C710601 (SIH3302030)	820	G	G	G	G			G									
38	5-38474 (SIH4022060)	880	G	G	G	G			G									

NO.	DESIG	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ	DIR	TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	IMPACT TEST (℃) ENERGY Joule	IMPACT TEST (℃) SHEAR AREA %	HARDNESS TEST	HEAT TREATMENT SN *11	PROTECTIVE COATING & LINING THICKNESS	P.H
		CHEMICAL COMPOSITION(%) 2			3		2	2	2	2	3	*8	*9	TENSILE TEST (Gage Length : 50mm)								
		*6 *7																				
기준 SPEC	MAX	26		120	30	30	40	40	40	15	80											
	MIN													60000	35000							
35	H	15	1	70	14	8																
	P	14	2	69	15	9	TR	1	1	1	TR		T	70830	49490	36				G		
	P	16	TR	69	16	6	1	1	1	1	TR		W	72397								
36	H	18	2	77	13	8																
	P	19	1	76	11	8	TR	1	1	1	TR		T	75520	51910	38				G		
	P	18	3	76	15	10	1	1	1	1	TR		W	75810								
37	H	16	2	75	14	7																
	P	16	2	75	14	8	1	1	1	1	2		T	72820	51480	46				G		
	P	17	2	74	16	8	2	1	1	1	1		W	73819								
38	H	18	18	44	21	7																
	P	17	19	45	19	6	TR	1	1	TR	TR		T	71250	50060	44				G		
	P	19	18	43	21	8	1	1	1	TR	TR		W	71970								

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 SeAH 포항강관품질검사팀장인