MILL'S QUALITY CERTIFICATES

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.: E200812-0057-002874(5003628)
제 품 명 COMMODITY : E.R.W STEEL PIPE
제 품 규 격 SPECIFICATION : API 5L B(PSL1)/ASTM A53B

발 급 일 자 DATE OF ISSUE : 2008.12.12
계 약 서 번 호 L/C No. (P/O No.) : 47LI-C80768-TCTT(1103066336)
수 요 가 CUSTOMER : PLESA
주 문 자 SHIPPER : DUFERCO SA

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
37	C815692 (SIIY131150)	BBE	24 " X 0.250 " X 6.120 M	47	287.640 M	27.401	CONFIRM TO NACE NORM MR0175(LAST EDITION) *ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY *DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
38	C836317 (SIIY131160)	BBE	24 " X 0.250 " X 6.120 M	2	12.240 M	1.166	
39	SB22355 (SIIY272090)	BBE	16 " X 0.500 " X 6.120 M	1	6.120 M	0.755	
40	SB22661 (SIIY272110)	BBE	16 " X 0.500 " X 6.120 M	1	6.120 M	0.755	

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	CHEMICAL COMPOSITION(%) DESIG *6	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ *8	DIR *9	TENSILE TEST (Gage Length : 50mm) TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	IMPACT TEST (℃) ENE-RGY Joule	SHEAR AREA %	HARD-NESS TEST	HEAT TREAT MENT SN *11	PROTECTIVE COATING & LINING THICK-NESS	P.H
																				2			3		2	2	2	2	3											
기준 SPEC									30										MAX	26		120	30	30	40	40	40	15	80											
																			MIN													60000	35000							
37	C815692	440	G	G	G	G			G										H	17	2	78	13	10																
	(SIIY131150)																		P	16	1	78	15	11	1	1	1	1	1		T	69550	48070	36				G		
																			P	18	2	79	14	12	1	1	1	1	1		W	72414								
38	C836317	440	G	G	G	G			G										H	17	1	82	13	9																
	(SIIY131160)																		P	16	TR	83	11	11	1	1	2	1	1		T	68270	48780	38				G		
																			P	17	1	83	11	11	1	1	1	1	1		W	71414								
39	SB22355	1310	G	G	G	G			G										H	18	1	74	13	9																
	(SIIY272090)																		P	17	1	73	15	8	1	2	1	TR	1		T	72530	46510	37				G		
																			P	17	2	75	14	7	1	1	1	TR	1		W	75255								
40	SB22661	1310	G	G	G	G			G										H	19	1	85	15	8																
	(SIIY272110)																		P	19	TR	86	16	10	TR	1	1	TR	TR		T	72680	47790	38				G		
																			P	18	2	86	14	7	TR	1	1	TR	TR		W	74246								

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.

N. J. Baek