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
41	SQ55445 (SIIY291120)	BBE	16 " X 0.312 " X 6.120 M	47	287.640 M	22.330	CONFIRM TO NACE NORM MR0175(LAST EDITION)
42	8-3868 (SIIY291140)	BBE	16 " X 0.312 " X 6.120 M	45	275.400 M	21.379	*ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY
43	C825565 (SIIZ011240)	BBE	24 " X 0.500 " X 6.120 M	1	6.120 M	1.144	*DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
44	SQ57800 (SIIZ021080)	BBE	24 " X 0.500 " X 6.120 M	18	110.160 M	20.607	

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
기준 SPEC									30						
41	SQ55445 (SIIY291120)	820	G	G	G	G			G						
42	8-3868 (SIIY291140)	820	G	G	G	G			G						
43	C825565 (SIIZ011240)	880	G	G	G	G			G						
44	SQ57800 (SIIZ021080)	880	G	G	G	G			G						

NO.	HEAT NO (BATCH NO.)	ZINC COATING TEST WEIGHT OF ZINC COAT-ING	균일성 C.S *4	알칼리 ALK *5	DESIG *6	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ *8	DIR *9	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											
						*7																				
기준 SPEC					MAX	26		120	30	30	40	40	40	15	80											
					MIN													60000	35000							
41	SQ55445 (SIIY291120)				H	17	2	76	11	3																
					P	16	3	77	10	2	TR	1	1	TR	1		T	71400	48350	36				G		
					P	17	3	77	9	2	1	1	1	TR	1		W	74117								
42	8-3868 (SIIY291140)				H	15	18	62	17	3																
					P	14	17	61	17	3	1	1	1	TR	1		T	68840	49350	37				G		
					P	16	19	62	18	5	1	1	1	TR	2		W	70548								
43	C825565 (SIIZ011240)				H	17	1	80	12	10																
					P	16	TR	81	14	10	1	2	2	1	1		T	70540	47640	40				G		
					P	18	1	79	10	9	1	1	1	1	1		W	73108								
44	SQ57800 (SIIZ021080)				H	17	1	86	13	4																
					P	16	1	86	13	4	1	1	TR	TR	1		T	75520	51200	37				G		
					P	17	1	85	12	5	1	1	TR	TR	TR		W	77673								

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