MILL'S QUALITY CERTIFICATES

12/15

SeAH Steel Corp.
(주)세아제강

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
45	SQ55634 (SIIZ031040)	BBE	20 " X 0.500 " X 6.120 M	1	6.120 M	0.949	
46	SQ57433 (SIIZ031100)	BBE	20 " X 0.500 " X 6.120 M	5	30.600 M	4.747	
47	SQ54977 (SIIZ031190)	BBE	20 " X 0.500 " X 6.120 M	10	61.200 M	9.493	
48	C837026 (SIIZ032050)	BBE	20 " X 0.250 " X 6.120 M	2	12.240 M	0.968	

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 CuS *4	알칼리 ALK *5
기준 SPEC									30									
45	SQ55634 (SIIZ031040)	1050	G	G	G	G			G									
46	SQ57433 (SIIZ031100)	1050	G	G	G	G			G									
47	SQ54977 (SIIZ031190)	1050	G	G	G	G			G									
48	C837026 (SIIZ032050)	530	G	G	G	G			G									

NO.	HEAT NO (BATCH NO.)	DESIG *6	CHEMICAL COMPOSITION(%) 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 (℃) ENERGY Joule	SHEAR AREA %	HARDNESS TEST	HEAT TREATMENT SN *11	PROTECTIVE COATING & LINING THICKNESS	P.H
			*7																				
기준 SPEC		MAX	26		120	30	30	40	40	40	15	80											
		MIN													60000	35000							
45	SQ55634 (SIIZ031040)	H	18	2	78	8	4																
		P	17	2	78	9	6	1	1	1	TR	1		T	75240	49780	38				G		
		P	19	2	78	9	6	1	1	1	TR	TR		W	75530								
46	SQ57433 (SIIZ031100)	H	17	1	83	14	4																
		P	16	2	83	15	3	TR	1	1	TR	TR		T	71400	46790	35				G		
		P	16	1	82	14	6	1	1	1	TR	TR		W	75966								
47	SQ54977 (SIIZ031190)	H	17	1	77	12	3																
		P	17	1	76	10	4	TR	TR	1	TR	TR		T	74380	47790	37				G		
		P	16	1	77	11	3	TR	TR	1	TR	1		W	76535								
48	C837026 (SIIZ032050)	H	17	1	75	17	10																
		P	16	TR	75	19	10	1	1	1	1	1		T	72110	56890	38				G		
		P	17	2	74	19	10	1	1	1	1	1		W	73828								

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

(주)세아제강 SeAH