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
25	SB22415 (SHIY122030)	BBE	10 " X SCH40 X 6.120 M	3	18.360 M	1.111	CONFIRM TO NACE NORM MR0175(LAST EDITION) *ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY *DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
26	SB22415 (SHIY122050)	BBE	10 " X SCH40 X 6.120 M	3	18.360 M	1.111	
27	SB21429 (SHIY122070)	BBE	10 " X SCH40 X 6.120 M	1	6.120 M	0.370	
28	SB21429 (SHIY122080)	BBE	10 " X SCH40 X 6.120 M	3	18.360 M	1.111	

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									
25	SB22415 (SHIY122030)	1430	G	G	G	G			G									
26	SB22415 (SHIY122050)	1430	G	G	G	G			G									
27	SB21429 (SHIY122070)	1430	G	G	G	G			G									
28	SB21429 (SHIY122080)	1430	G	G	G	G			G									

NO.	HEAT NO (BATCH NO.)	CHEMICAL COMPOSITION(%) DESIG *6	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ *8	TENSILE TEST (Gage Length : 50mm) 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											
기준 SPEC		MAX	26		120	30	30	40	40	40	15	80											
		MIN													60000	35000							
25	SB22415 (SHIY122030)	H	18	1	77	13	8																
		P	17	TR	77	14	7	1	1	1	TR	TR		T	73960	50200	40				G		
		P	17	2	77	11	6	TR	1	1	TR	TR		W	75539								
26	SB22415 (SHIY122050)	H	18	1	77	13	8																
		P	19	2	77	11	9	1	1	1	TR	1		T	72530	48780	39				G		
		P	19	TR	77	13	6	1	2	2	TR	1		W	74970								
27	SB21429 (SHIY122070)	H	18	1	79	13	10																
		P	17	TR	80	11	9	TR	1	1	TR	1		T	70540	50350	39				G		
		P	19	2	80	13	10	1	2	1	TR	TR		W	72681								
28	SB21429 (SHIY122080)	H	18	1	79	13	10																
		P	19	2	80	11	12	TR	1	1	TR	1		T	71540	47930	37				G		
		P	19	TR	79	12	8	TR	1	1	TR	TR		W	73974								

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