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
33	C836999 (SHIY272060)	BBE	10 " X SCH40 X 6.120 M	36	220.320 M	13.329	CONFIRM TO NACE NORM MR0175(LAST EDITION) *ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY *DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
34	SB24781 (SHIZ082010)	BBE	10 " X 0.250 " X 6.120 M	124	758.880 M	31.941	
35	C815691 (SIIY131080)	BBE	24 " X 0.250 " X 6.120 M	1	6.120 M	0.583	
36	C815786 (SIIY131140)	BBE	24 " X 0.250 " X 6.120 M	1	6.120 M	0.583	

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									
33	C836999 (SHIY272060)	1430	G	G	G	G			G									
34	SB24781 (SHIZ082010)	980	G	G	G	G			G									
35	C815691 (SIIY131080)	440	G	G	G	G			G									
36	C815786 (SIIY131140)	440	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	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
			2			3		2	2	2	2	3											
			*7																				
기준 SPEC		MAX	26		120	30	30	40	40	40	15	80											
		MIN													60000	35000							
33	C836999 (SHIY272060)	H	16	TR	85	13	7																
		P	15	1	84	11	9	1	1	1	1	1		T	73670	57170	35				G		
		P	16	1	85	13	6	1	1	1	1	1		W	75241								
34	SB24781 (SHIZ082010)	H	16	1	69	13	7																
		P	15	1	69	12	7	TR	1	1	TR	1		T	68550	51060	37				G		
		P	17	2	70	11	5	TR	1	2	TR	1		W	72268								
35	C815691 (SIIY131080)	H	16	2	78	14	10																
		P	15	1	78	12	12	1	1	1	1	1		T	68130	48350	36				G		
		P	17	2	77	15	10	1	2	2	1	1		W	69850								
36	C815786 (SIIY131140)	H	17	1	78	13	10																
		P	18	1	79	12	12	2	2	1	1	1		T	67840	47360	38				G		
		P	17	TR	78	11	11	1	2	2	1	1		W	70699								

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