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
13	SP28045 (SHIY102060)	BBE	10 " X 0.250 " X 6.120 M	4	24.480 M	1.030	CONFIRM TO NACE NORM MR0175(LAST EDITION) *ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY *DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
14	SP28045 (SHIY102070)	BBE	10 " X 0.250 " X 6.120 M	1	6.120 M	0.258	
15	SQ52331 (SHIY102090)	BBE	10 " X 0.250 " X 6.120 M	1	6.120 M	0.258	
16	SQ54810 (SHIY102100)	BBE	10 " X 0.250 " X 6.120 M	1	6.120 M	0.258	

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									
13	SP28045 (SHIY102060)	980	G	G	G	G			G									
14	SP28045 (SHIY102070)	980	G	G	G	G			G									
15	SQ52331 (SHIY102090)	980	G	G	G	G			G									
16	SQ54810 (SHIY102100)	980	G	G	G	G			G									

NO.	HEAT NO (BATCH NO.)	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 (℃) 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							
13	SP28045 (SHIY102060)	H	14	1	67	12	6																
		P	15	2	67	13	4	1	1	1	TR	TR		T	67270	49660	38				G		
		P	14	TR	66	11	4	1	1	1	TR	TR		W	71988								
14	SP28045 (SHIY102070)	H	14	1	67	12	6																
		P	13	TR	67	10	8	1	1	1	TR	1		T	67410	51510	36				G		
		P	13	2	67	14	4	1	1	1	TR	TR		W	70414								
15	SQ52331 (SHIY102090)	H	14	1	67	14	3																
		P	15	2	67	15	2	TR	1	1	TR	1		T	71110	50200	37				G		
		P	13	TR	66	13	5	1	1	1	TR	TR		W	74268								
16	SQ54810 (SHIY102100)	H	17	1	78	11	3																
		P	16	TR	79	12	1	1	1	1	TR	TR		T	74530	52200	35				G		
		P	17	TR	78	11	5	1	1	1	TR	TR		W	77233								

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