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
17	3-4151 (SHIY111020)	BBE	10 " X 0.250 " X 6.120 M	20	122.400 M	5.152	CONFIRM TO NACE NORM MR0175(LAST EDITION)
18	SB22412 (SHIY112010)	BBE	10 " X SCH40 X 6.120 M	2	12.240 M	0.740	*ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY
19	SB22068 (SHIY112020)	BBE	10 " X SCH40 X 6.120 M	10	61.200 M	3.703	*DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
20	SB22076 (SHIY112030)	BBE	10 " X SCH40 X 6.120 M	7	42.840 M	2.592	

NO.	HEAT NO (BATCH NO.)	HYDROSTATIC TEST 5 Sec. psi	HYDROSTATIC TEST 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									
17	3-4151 (SHIY111020)	980	G	G	G	G			G									
18	SB22412 (SHIY112010)	1430	G	G	G	G			G									
19	SB22068 (SHIY112020)	1430	G	G	G	G			G									
20	SB22076 (SHIY112030)	1430	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											
기준 SPEC		MAX	26		120	30	30	40	40	40	15	80											
		MIN													60000	35000							
17	3-4151 (SHIY111020)	H	16	19	65	15	3																
		P	15	18	64	13	3	1	1	1	1	1		T	74530	54040	38				G		
		P	16	19	64	13	4	1	1	1	1	2		W	76966								
18	SB22412 (SHIY112010)	H	18	2	81	15	4																
		P	18	2	81	16	5	1	1	1	TR	1		T	73100	50200	40				G		
		P	17	2	81	13	5	1	1	1	TR	1		W	75673								
19	SB22068 (SHIY112020)	H	17	2	81	14	4																
		P	18	1	80	12	4	TR	1	1	TR	TR		T	70970	50490	40				G		
		P	18	2	82	13	5	TR	1	1	TR	1		W	73832								
20	SB22076 (SHIY112030)	H	17	2	75	12	6																
		P	16	1	74	12	7	1	1	1	TR	TR		T	71540	50200	36				G		
		P	16	2	76	10	6	TR	1	1	TR	TR		W	74401								

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