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MILL'S QUALITY CERTIFICATES

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.: E200905-0021-000489(5004055)

제 품 명
COMMODITY : E.R.W STEEL PIPE

제 품 규 격
SPECIFICATION : API 5LB PSL1/ASTM A53B(2007)

발 급 일 자
DATE OF ISSUE : 2009.04.30

계 약 서 번 호
L/C No. (P/O No.) : 47LI-C94065-TLRR(1103070196)

수 요 가 :
CUSTOMER : PLESA

주 문 자 :
SHIPPER : DUFERCO SA

NO.	HEAT NO. (BATCH NO.)	관단 TYPE *1	주문치수 ORDER SIZE	수량 QUANTITY 본수 PCS	총길이 TOTAL LENGTH	중량(M/T) WEIGHT	비고 REMARK
37	4-54640 (SIJ4141020)	BBE	20 " X 0.250 " X 6.120 M	23	140.760 M	11.142	CONFIRM TO NACE NORM MR0175(LAST EDITION)
38	SP38565 (SIJ4141060)	BBE	20 " X 0.250 " X 6.120 M	1	6.120 M	0.484	*ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY *DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
39	SQ64966 (SIJ4151160)	BBE	24 " X 0.500 " X 6.120 M	13	79.560 M	14.883	
40	5-53421 (SIJ4152010)	BBE	24 " X 0.500 " X 6.120 M	40	244.800 M	45.792	

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									
37	4-54640 (SIJ4141020)	1990	G	G	G	G			G									
38	SP38565 (SIJ4141060)	1990	G	G	G	G			G									
39	SQ64966 (SIJ4151160)	1990	G	G	G	G			G									
40	5-53421 (SIJ4152010)	1990	G	G	G	G			G									

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	IMPACT TEST (℃) SHEAR AREA %	HARDNESS TEST HRC	HEAT TREATMENT SN *11	PROTECTIVE COATING & LINING THICK-NESS	PROTECTIVE COATING & LINING P.H
		2			3		2	2	2	2	3	*7										
기준 SPEC	MAX	26		120	30	30	40	100	40	15	80								22			
	MIN													60200	35500							
37	H	16	17	43	13	5																
	P	15	17	42	11	6	1	1	1	1	2		T	69900	51480	36			10	G		
	P	15	18	43	14	6	1	1	1	1	1		W	75420								
38	H	14	1	67	7	4																
	P	13	1	67	8	2	TR	1	1	TR	1		T	68450	48290	36			9	G		
	P	14	2	68	5	6	TR	1	TR	TR	1		W	75270								
39	H	19	1	85	11	4																
	P	18	TR	84	9	3	1	TR	TR	TR	1		T	72800	50320	34			12	G		
	P	18	1	86	12	3	1	1	1	TR	2		W	77300								
40	H	16	17	41	17	4																
	P	15	16	40	15	5	1	2	1	1	1		T	70920	48000	37			9	G		
	P	15	18	41	15	3	1	1	1	TR	1		W	76580								

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

주식회사세아제강 SeAH 품질경영팀장인