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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. : 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-ILRR(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
41	6-19255 (SIG7081080)	BBE	24 " X 0.375 " X 6.120 M	5	30.600 M	4.305	CONFIRM TO NACE NORM MR0175(LAST EDITION). *ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY *DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
42	5-53421 (SIG7081090)	BBE	24 " X 0.250 " X 6.120 M	22	134.640 M	12.825	
43	5-52769 (SIG7081100)	BBE	24 " X 0.250 " X 6.120 M	41	250.920 M	23.903	
44	SQ64963 (SIG7081101)	BBE	24 " X 0.250 " X 6.120 M	37	226.440 M	21.571	

NO.	HEAT NO (BATCH NO.)	HYDROSTATIC TEST 5 Sec. psi	RESULT	N.D.T. *2	VISUAL	DIMENSION &	FLATTENING	SHOCK	COMPRESSION	REMAGNETISM 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									
41	6-19255 (SIG7081080)	1990	G	G	G	G	G			G									
42	5-53421 (SIG7081090)	1990	G	G	G	G	G			G									
43	5-52769 (SIG7081100)	1990	G	G	G	G	G			G									
44	SQ64963 (SIG7081101)	1990	G	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 HRC	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	100	40	15	80								22			
		MIN													60200	35500							
41	6-19255 (SIG7081080)	H	16	1	84	11	6																
		P	15	TR	83	11	8	1	1	1	TR	1		T	69180	49740	35			9	G		
		P	16	2	84	9	8	1	1	1	TR	1		W	74110								
42	5-53421 (SIG7081090)	H	16	17	41	17	4																
		P	15	17	42	19	3	1	1	1	1	1		T	69760	52640	35			9	G		
		P	15	17	42	17	2	1	1	1	1	TR		W	76290								
43	5-52769 (SIG7081100)	H	17	18	45	19	5																
		P	16	18	45	17	6	1	1	TR	1	TR		T	70920	51630	36			10	G		
		P	18	19	46	21	4	TR	1	TR	1	TR		W	74540								
44	SQ64963 (SIG7081101)	H	14	1	65	11	4																
		P	13	1	65	13	2	TR	TR	1	TR	1		T	70770	47420	36			8	G		
		P	15	1	66	12	6	TR	TR	1	TR	2		W	73530								

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