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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. : E200806-0113-001255(5002660)
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 : 2008.06.16
계 약 서 번 호 / L/C No. (P/O No.) : 47LI-C45661-TJFE(0801844)
수 요 가 / CUSTOMER : DUFERCO SA
주 문 자 / SHIPPER : SEAH STEEL CORPORATION

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
9	4-47573 (SII3312220)	BBE	24 " X 0.250 "(1/4") X 6.120 M	46	281.520 M	26.818	1/4
10	SQ25482 (SII4162300)	BBE	16 " X 0.375 "(3/8") X 6.120 M	1	6.120 M	0.569	3/8"
11	SQ25488 (SII4171060)	BBE	16 " X 0.375 "(3/8") X 6.120 M	5	30.600 M	2.845	3/8"
12	SQ35229 (SII4242250)	BBE	20 " X 0.375 "(3/8") X 6.120 M	12	73.440 M	8.576	3/8"

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	합금량 C.S *4	알루미늄 ALR *5	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
																				5	2		3		2	2	2	2	3	4											
기준 SPEC									30										MAX	26		120	30	30	40	40	40	15	80											
																			MIN												60000	35000							
9	4-47573 (SII3312220)	440	G	G	G	G			G										H	16	18	45	15	6															
																			P	15	19	45	15	4	1	1	1	TR	1		T	70120	53620	40				G		
																			P	17	18	44	15	5	1	1	1	TR	1		W	73121								
10	SQ25482 (SII4162300)	980	G	G	G	G			G										H	14	11	86	13	3															
																			P	13	12	85	13	4	TR	1	1	TR	1		T	74660	63290	41				G		
																			P	14	10	87	14	4	TR	1	1	TR	1		W	77375								
11	SQ25488 (SII4171060)	980	G	G	G	G			G										H	13	13	87	14	3															
																			P	12	13	87	15	2	1	1	1	TR	1		T	74790	65570	38				G		
																			P	14	12	86	13	2	1	1	1	TR	1		W	76077								
12	SQ35229 (SII4242250)	790	G	G	G	G			G										H	17	2	85	11	5															
																			P	16	1	84	11	6	1	1	1	TR	1		T	70830	49630	40				G		
																			P	17	3	86	13	7	TR	1	1	TR	1		W	74686								

NOTE *1 ~ *12 : Refer To The Attached Section Designation

OTHER *DESCRIPTION OF GOODS : 364.507 MT (+/- 10 PCT.)PRIME ERW PIPES / GRADE: API 5L-B/ ASTM A53B.GRADE: API 5L-B/ ASTM A53B.
*PHYSICAL PROPERTIES SAME AS TENSILE TEST & IMPACT TEST.

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.
J.E. KIM