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MILL'S QUALITY CERTIFICATES

SeAH 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.: E200709-0077-002313(5002028)
제 품 명 COMMODITY : E.R.W STEEL PIPE
제 품 규 격 SPECIFICATION : API 5LB PSL1/ASTM A53B(2006)

발 급 일 자 DATE OF ISSUE : 2007.08.31
계 약 서 번 호 L/C No. (P/O No.) : PLESA
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
31	C714088 (SIH7191040)	BBE	14 " X 0.312 " X 6.120 M	108	660.960 M	44.773	PO.NO :1103054906
32	SQ11689 (SIH7191050)	BBE	14 " X 0.312 " X 6.120 M	7	42.840 M	2.902	
33	5-41168 (SIH7191130)	BBE	14 " X 0.500 " X 6.120 M	1	6.120 M	0.657	
34	6-26907 (SIH7191140)	BBE	14 " X 0.500 " X 6.120 M	1	6.120 M	0.657	

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									

NO.	DESIG	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ	DIR	TENSILE STRENGTH	YIELD STRENGTH	E.L % *10	IMPACT TEST (℃) ENERGY Joule	IMPACT TEST (℃) SHEAR AREA %	HARDNESS TEST	HEAT TREATMENT SN *11	PROTECTIVE COATING & LINING THICKNESS	PROTECTIVE COATING & LINING P.H
		2			3							*8	*9	psi	psi							
기준 SPEC	MAX	26		120	30	30	40	40	40	15	80											
	MIN													60000	35000							
31	H	16	3	81	12	7																
C714088 (SIH7191040)	P	16	2	80	11	9	1	1	1	1	1		T	73250	54330	41				G		
	P	17	3	80	12	6	1	1	1	1	1		W	73392								
32	H	18	1	81	14	4																
SQ11689 (SIH7191050)	P	19	TR	82	13	4	1	1	1	TR	TR		T	69260	45370	40				G		
	P	18	2	81	16	3	1	1	1	TR	TR		W	68272								
33	H	15	18	44	18	5																
5-41168 (SIH7191130)	P	16	19	43	20	7	1	1	1	1	1		T	67980	46790	36				G		
	P	15	18	45	16	7	1	1	1	1	1		W	68272								
34	H	16	16	38	25	5																
6-26907 (SIH7191140)	P	17	15	37	27	4	TR	1	1	1	1		T	67840	47070	40				G		
	P	17	15	38	26	3	TR	1	1	1	2		W	66565								

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.

J.E. KIM

주식회사세아제강 SeAH 포항상생품질경영팀장인