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.: E200807-0214-001541(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 : 2008.07.18

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
5	C813331 (SII6282190)	BBE	18 " X 0.375 "(3/8") X 6.120 M	8	48.960 M	5.133	

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									
5	C813331 (SII6282190)	880	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 (℃) ENE-RGY Joule	SHEAR AREA %	HARD-NESS TEST	HEAT TREAT MENT SN *11	PROTECTIVE COATING & LINING THICK-NESS	P.H
		2			3		2	2	2	2	3											
		*7																				
기준 SPEC	MAX	26		120	30	30	40	40	40	15	80											
	MIN													60000	35000							
5	H	16	1	79	20	6																
	P	15	1	79	22	5	1	2	1	1	1		T	68550	52050	35				G		
	P	17	2	80	21	7	1	1	2	1	1		W	73406								

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

OTHER: DESCRIPTION OF GOODS : 1,409.329 MT (+/- 10 PCT.)PRIE ERW PIPES / GRADE: API 5L-B/ ASTM A53B.GRADE:AP 5L-B/ ASTM A53B.
PHYSICAL PROPERTIES SAME AS TENSILE TEST & IMPACTEST.

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 포항영업소품질경영팀장)