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.: E200807-0213-001540(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
22	2-6543 (SHI5122050)	BBE	10 " X 0.365 "(SCH40) X 6.120 M	122	746.640 M	45.172	
23	9-3869 (SHI5122060)	BBE	10 " X 0.365 "(SCH40) X 6.120 M	78	477.360 M	28.880	
24	2-6540 (SHI5122070)	BBE	10 " X 0.365 "(SCH40) X 6.120 M	231	1,413.720 M	85.530	
25	2-8257 (SHI6072130)	BBE	14 " X 0.375 "(3/8") X 6.120 M	1	6.120 M	0.496	

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	DESIG *6	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ	DIR	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
																				CHEMICAL COMPOSITION(%)												TENSILE TEST (Gage Length : 50mm)									
																				2			3		2	2	2	2	3												
																				*7										*8	*9									
기준 SPEC									30										MAX	26		120	30	30	40	40	40	15	80											
																			MIN													60000	35000							
22	2-6543	1430	G	G	G	G			G										H	14	18	60	20	3																
	(SHI5122050)																		P	13	18	60	22	2	1	1	TR	TR	1		T	69260	49210	39				G		
																			P	14	18	59	19	3	1	1	1	TR	1		W	73686								
23	9-3869	1430	G	G	G	G			G										H	16	18	63	16	2																
	(SHI5122060)																		P	15	18	64	14	4	1	1	1	1	2		T	69690	48640	37				G		
																			P	16	18	63	18	3	1	1	1	TR	1		W	71259								
24	2-6540	1430	G	G	G	G			G										H	16	18	62	17	4																
	(SHI5122070)																		P	15	19	62	15	2	1	1	1	1	1		T	70970	51910	40				G		
																			P	15	18	62	16	2	1	1	1	1	1		W	73974								
25	2-8257	1130	G	G	G	G			G										H	17	18	62	19	4																
	(SHI6072130)																		P	18	17	63	21	4	1	1	1	1	1		T	75240	51910	36				G		
																			P	17	19	63	19	6	1	1	1	TR	1		W	76530								

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 포항공장품질경영팀)