

PAGE : 1 / 1  
 증명서번호  
 CERTIFICATE NO. : E201205-0129-001238(5007927)  
 제품명  
 COMMODITY : H.F.W STEEL PIPE  
 제품규격  
 SPECIFICATION : API 5LB PSL1/ASTM A53B(2007)

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

발급일자  
 DATE OF ISSUE : 2012.05.21  
 계약서번호  
 L/C No. (P/O No.) : 1103096734  
 수 요 가 :  
 CUSTOMER : PLESA  
 주 문 자 :  
 SHIPPER : DUFERCO SA

NO.	HEAT NO. (BATCH NO.)	관 단 TYPE	주 문 치 수 ORDER SIZE			수 량 QUANTITY			비 고 REMARK
			*1			본 수 PCS	총 길 이 TOTAL LENGTH	중 량(M/T) WEIGHT	
1	SQ69170 (RIM4281041)	BBE	24 "	X 0.250 "	X 6.120 M	3	18.360 M	1.749	* NACE MR 0175 <b>ORIGINAL</b>
2	SP29943 (SIM4201090)	BBE	20 "	X 0.250 "	X 6.120 M	95	581.400 M	46.024	
3	SQ69170 (SIM5031090)	BBE	24 "	X 0.250 "	X 6.120 M	75	459.000 M	43.724	

NO.	HEAT NO. (BATCH NO.)	HYDROSTATIC TEST		N · D · T	V I S U A L & S I M U L T	F L A T T E N I N G	S H O C K	C O M P R E S S I O N	R E A G I N D U S T R I A L S M	B E N D I N G	D R I F T	C R U S H	F L A R I N G	F L A N G E	R E L A T I V E T E N S I L I N G	ZINC COATING TEST			CHEMICAL COMPOSITION(%)											TENSILE TEST (Gage Length : 50mm)			IMPACT TEST (°C)		HARD-NESS TEST	HEAT TREATMENT			
		10 Sec.	R E S U L T													W E I G H T O F Z I N C C O A T I N G	C	S i	M n	P	S	C u	N i	C r	M o	V	N b	T i	C E Q	D I R	T E N S I L E S T R E N G T H	Y I E L D S T R E N G T H	E . L	E N E - R G Y			S H E A R A R E A	H R B	S N
		*2	*3													*4	*5	*6	*7											*8	*9	*10	*11						
기준 SPEC									30								MAX	26		120	30	30	40	40	40	15	80							99					
1	SQ69170 (RIM4281041)	450	G	G	G	G			G								H	15	1	67	9	5							26	T	65550	45830	40			83	G		
2	SP29943 (SIM4201090)	540	G	G	G	G			G								P	15	1	68	10	6	1	1	2	TR	2	2	1	27	W	69180							
																	H	15	1	68	14	6						26											
																	P	15	1	69	15	5	1	1	1	TR	1	1	1	27	T	66860	44960	39			83	G	
3	SQ69170 (SIM5031090)	450	G	G	G	G			G								P	15	1	69	15	6	1	1	1	TR	1	1	1	27	W	71350							
																	H	15	1	67	9	5						26											
																	P	15	1	66	10	5	1	1	1	TR	2	2	2	26	T	63960	44380	40			83	G	
																	P	16	1	68	10	4	1	1	1	TR	2	2	2	28	W	68160							

OTHERS : \*1-BBE:Black Beveled End(30°) \*2-U:Weld Seam Ultrasonic Test \*3-G:GOOD \*Tr:Trace \*4-H:Heat(Ladle) Analysis, P:Product Analysis \*5-2:X100, 3:X1000 \*6-C2:C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15 \*7-T:Base Metal Transverse, W:Weld Part Transverse \*8-E.L:Elongation \*9-S.N:Seam Normalizing \*10-GOOD \*Tr:Trace \*11-S.N:Seam Normalizing

\* THIS CERTIFICATE IS ISSUED ACCORDING TO EN 10204 3.1 (ISO 10474 3.1.B)

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

