



출신공장 : 울산광역시 북구 영포로 706
706, Yeompo-ro, Buk-gu, Ulsan, Korea

검사증명서 MILL TEST CERTIFICATE

EN 10204 TYPE 3.1 - 2004

CUSTOMER(고객사): PLESA ANAHUACYIAS., S.A. DE C.V.

Page 1 of 1

CERTIFICATE NO.(증서번호) : D003131
 DATE OF ISSUE(발행일자) : 2019-02-25
 CONTRACT(P/O) NO.(계약번호) : 27795
 PRJ.NO.(프로젝트번호) : F181200191
 COMMODITY(제품명) : ERW CARBON STEEL PIPE
 SPECIFICATION(제정규격) : ASTM A53 B

No.	TYPE OF PIPE END ※1	SIZE OUT-DIA×THICK×LENGTH (외경×두께×길이)	PCS (부)	WEIGHT (KG)	TOTAL LENGTH (M)	HEAT No.	Hydrostatic Test		Tensile Properties(Gage Length: 2 inch)				Hardness Test		Hardness Test & O/N Impact Test		D.W.T Test (C)																																																																															
							Pressure PSI	Time SEC	Base MPa	Weld MPa	Yield Strength MPa	EL %	Max. Value	Absorbed Energy(Joule)	Shear Area (%)	1		2	avg																																																																													
1	EB BE	12" X 0.225" X 6.150 M	75	20,678	461.25	P97979	742	5	451	434	381																																																																																					
		TOTAL	75	20,678	461.25																																																																																											
<p>Chemical Composition(%)</p> <table border="1"> <thead> <tr> <th>Spec.</th> <th>C</th> <th>Si</th> <th>Mn</th> <th>P</th> <th>S</th> <th>Cu</th> <th>Ni</th> <th>Cr</th> <th>Mo</th> <th>V</th> <th>CA8</th> <th>※10</th> </tr> </thead> <tbody> <tr> <td>※4</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Max.</td> <td>30</td> <td></td> <td>120</td> <td>50</td> <td>45</td> <td>40</td> <td>40</td> <td>40</td> <td>150</td> <td>80</td> <td>1000</td> <td></td> </tr> <tr> <td>H</td> <td>5</td> <td>1</td> <td>73</td> <td>11</td> <td>6</td> <td></td> <td></td> <td></td> <td>2</td> <td>2</td> <td>1</td> <td>45</td> </tr> <tr> <td>P</td> <td>6</td> <td>1</td> <td>74</td> <td>11</td> <td>9</td> <td>1</td> <td>1</td> <td>2</td> <td>2</td> <td>2</td> <td>1</td> <td>47</td> </tr> <tr> <td>P</td> <td>6</td> <td>1</td> <td>73</td> <td>11</td> <td>8</td> <td>1</td> <td>1</td> <td>2</td> <td>2</td> <td>2</td> <td>1</td> <td>47</td> </tr> </tbody> </table>																			Spec.	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	CA8	※10	※4	2	2	2	3	3	2	2	2	3	3	3	3	Max.	30		120	50	45	40	40	40	150	80	1000		H	5	1	73	11	6				2	2	1	45	P	6	1	74	11	9	1	1	2	2	2	1	47	P	6	1	73	11	8	1	1	2	2	2	1	47
Spec.	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	CA8	※10																																																																																				
※4	2	2	2	3	3	2	2	2	3	3	3	3																																																																																				
Max.	30		120	50	45	40	40	40	150	80	1000																																																																																					
H	5	1	73	11	6				2	2	1	45																																																																																				
P	6	1	74	11	9	1	1	2	2	2	1	47																																																																																				
P	6	1	73	11	8	1	1	2	2	2	1	47																																																																																				
<p>HC-Test Collapse Pressure</p> <table border="1"> <thead> <tr> <th>HC-Test Collapse Pressure</th> <th>Zn-Coating Test</th> <th>HIC Test</th> <th>S.S.C.C Test</th> </tr> </thead> <tbody> <tr> <td>psi</td> <td>Time Result</td> <td>CLR</td> <td>CSR</td> </tr> <tr> <td></td> <td></td> <td>%</td> <td>%</td> </tr> </tbody> </table>																			HC-Test Collapse Pressure	Zn-Coating Test	HIC Test	S.S.C.C Test	psi	Time Result	CLR	CSR			%	%																																																																		
HC-Test Collapse Pressure	Zn-Coating Test	HIC Test	S.S.C.C Test																																																																																													
psi	Time Result	CLR	CSR																																																																																													
		%	%																																																																																													
<p>Heat Treatment</p> <table border="1"> <thead> <tr> <th>Heat Treatment</th> <th>Non-Destructive Test (U.T)</th> <th>Rolling / Bending Test</th> <th>Visual & Dimension</th> </tr> </thead> <tbody> <tr> <td>GOOD</td> <td>GOOD</td> <td>GOOD</td> <td>GOOD</td> </tr> </tbody> </table>																			Heat Treatment	Non-Destructive Test (U.T)	Rolling / Bending Test	Visual & Dimension	GOOD	GOOD	GOOD	GOOD																																																																						
Heat Treatment	Non-Destructive Test (U.T)	Rolling / Bending Test	Visual & Dimension																																																																																													
GOOD	GOOD	GOOD	GOOD																																																																																													
<p>Heat No. P97979</p>																																																																																																
<p>Remark</p> <p>※1) Type of pipe end(단종) EB:ERW Back BE:Bevel End ※2) L: Longitudinal, T: Transverse ※3) B: Base, W: Weld Line, H: Heat Affected Zone ※4) H: Heat(Ladle) Analysis, P: Product Analysis ※7) For each reduction of 0.01% below the specified C max. an increase of 0.06% Mn above the specified max. will be permitted up to a max of 1.65% ※10) CMB-Cu+Ni-Cr+Mo+V ※ SPEC YEAR - ASTM A53(2018ED)</p>																																																																																																

HYUNDAI STEEL

본 제품은 관련 규격에 합격되었음을 보증합니다.
 WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN ACCEPTED IN ACCORDANCE WITH THE PRESCRIBED SPECIFICATION AND ORDER.
 * 본 검사증명서에 영기된 규격용도의 사용에 인준상 문제가 발생할 수 있으며, 검사증명서 위·변조시 사후에 불이익을 당할 수 있습니다.

SUN-EVOR

QA Manager

* 본 검사증명서는 원본인 전자문서(전자서명 정보 포함)로부터 출력된 사본입니다. 전자문서의 내용은 원본과 동일하며, 전자문서로 출력된 사본의 효력은 원본과 동일합니다.
 * This Mill Test Certificate is a copy that has been printed from original electronic document(with digital signing).
 You are able to check an original electronic document at <http://sm.hyundai-steel.com/cs/cm/login.jsp> * QRcode scanner App : 'QRreal'