

CERTIFICATE NO(증서 번호) : D003675
 DATE OF ISSUE(발행일자) : 2019-02-26
 CONTRACT(P/O) NO.(계약번호) : 27795
 PRJ NO.(프로젝트번호) : F 81200191
 COMMODITY(제품명) : ERW CARBON STEEL PIPE
 SPECIFICATION(제품규격) : ASTM A53 B

검사증명서

MILL TEST CERTIFICATE

EN 10204 TYPE 3.1 - 2004

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



출산공장 : 울산광역시 북구 영곡로 705
 706, Yeompo-ro, Buk-gu, Ulsan, Korea



No.	TYPE OF PIPE END	SIZE OUT-DIA×THICK×LENGTH (외경×두께×길이)	PCS (본)	WEIGHT (KG)	TOTAL LENGTH (M)	HEAT No.	Hydrostatic Test		Tensile Properties(Gage Length: 2 inch)				Hardness Test		Hardness Test & CN Impact Test			D.W.T. Test (C)																																																																																																																																																																										
							Pressure	Time	Yield Strength	Tensile Strength	Base	Weld	Y/R	EL	Max. Value	Absorbed Energy(Joule)	Shear Area		1	2	avg																																																																																																																																																																							
Spec.	Min.	Max.	Min.	Max.	Min.	Max.	PSI	SEC	Mpa	Mpa	%	%	%	%	1	2	avg	1	2	avg																																																																																																																																																																								
1	EB BE	16" X 0.500" X 6.150 M	28	21,232	172.2	P89140	1310	5	476	486	410																																																																																																																																																																																	
TOTAL			28	21,232	172.2																																																																																																																																																																																							
<p>2.1 x 100.3 x 1000 4. x 10000</p> <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>OU</th> <th>Ni</th> <th>Cr</th> <th>Mo</th> <th>V</th> <th>CUB</th> <th>Mo</th> <th>Cr</th> <th>Ni</th> <th>S</th> <th>P</th> <th>Mn</th> <th>C</th> <th>Si</th> <th>Mn</th> <th>P</th> <th>S</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> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td></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>60</td> <td>1000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>H</td> <td>5</td> <td>1</td> <td>74</td> <td>14</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>P</td> <td>6</td> <td>1</td> <td>75</td> <td>11</td> <td>4</td> <td>1</td> <td>1</td> <td>2</td> <td>2</td> <td>1</td> <td>40</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>P</td> <td>6</td> <td>1</td> <td>74</td> <td>11</td> <td>3</td> <td>1</td> <td>1</td> <td>2</td> <td>2</td> <td>1</td> <td>38</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Zn-Coating test</p> <table border="1"> <thead> <tr> <th>Zn Coating</th> <th>Copper Sulfate Test</th> <th>Time</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>HC-Test</p> <table border="1"> <thead> <tr> <th>Collaps Pressure</th> <th>psi</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>HIC Test</p> <table border="1"> <thead> <tr> <th>CLR</th> <th>CTR</th> <th>CSR</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>S.S.C.C Test</p> <table border="1"> <thead> <tr> <th>Test</th> <th>CSR</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table> <p>Remark</p> <p>※1) Type of pipe end(단종) EB: ERW Black 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) CM9-Cu+Hf+Cr+Mo+V ※ SPEC YEAR - ASTM A53(2018ED)</p>																						Spec.	C	Si	Mn	P	S	OU	Ni	Cr	Mo	V	CUB	Mo	Cr	Ni	S	P	Mn	C	Si	Mn	P	S	※4	2	2	2	3	3	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		30		120	50	45	40	40	40	150	60	1000													H	5	1	74	14	5																			P	6	1	75	11	4	1	1	2	2	1	40													P	6	1	74	11	3	1	1	2	2	1	38													Zn Coating	Copper Sulfate Test	Time	Result					Collaps Pressure	psi	Result				CLR	CTR	CSR				Test	CSR		
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Heat No.		P89140																																																																																																																																																																																										
Heat Treatment		GOOD																																																																																																																																																																																										
Non-Destructive Test (U.T)		GOOD																																																																																																																																																																																										
Flattening / Bending Test		GOOD																																																																																																																																																																																										
Visual & Dimension		GOOD																																																																																																																																																																																										

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.
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SURVEOR

QA Manager

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