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CONTRACT(P/O) NO.(계약번호) : 27795
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COMMODITY(제품명) : E.R.W. CARBON STEEL PIPE
SPECIFICATION(제품규격) : ASTM A53 B

검사증명서
MILL TEST CERTIFICATE
EN 10204 TYPE 3.1 - 2004

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

HYUNDAI STEEL
울산공장 : 울산광역시 북구 염포로 706
706, Yeompo-ro, Buk-gu, Ulsan, Korea

No.	TYPE OF PIPE END ※1	SIZE OUT-DIA×THICK×LENGTH (외경×두께×길이)	PCS (본)	WEIGHT (KG)	TOTAL LENGTH (M)	HEAT No.	Hydrostatic Test Pressure (PSI)	Hydrostatic Test Time (SEC)	Spec. Min.	Spec. Max.	※2	Tensile Properties(Gage Length : 2 inch) Tensile Strength Base (MPa)	Tensile Strength Weld (MPa)	Yield Strength (MPa)	Y/R Rate (%)	E.L (%)	※3	Hardness Test Max. Value	※2 ※3
												415	415	240		25			
1	EB BE	10" X 0.225 " X 6.150 M	90	20,850	553.5	SC90634	860	5			T	500	503	333		41			
		TOTAL	90	20,850	553.5														

Hardness Test & CVN Impact Test							D.W.T Test(°C)		
	CVN Impact Test(°C)						Shear Area(%)		
	Absorbed Energy(Joule)					Shear Area (%)			
Specimen size	1	2	3	avg			1	2	avg
Criteria : In the case of 10×10									

No.	Heat No.	Spec.	※4	Chemical Composition(%) C	Si	Mn ※7	P	S	Cu	Ni	Cr	Mo	V	CM3 ※10	2 :×100 3 :×1000 4 :×10000	Zn-Coating Test Zn Coating	Copper Sulfate Test Time	Copper Sulfate Test Result	HC-Test Collapse Pressure	H.I.C Test CLR	CTR	CSR	S.S.C.C Test
				2	2	2	3	3	2	2	2	3	3	3					psi	%	%	%	
		Min.																					
		Max.		30		120	50	45	40	40	40	150	80	1000									
1	SC90634		H	17	1	48	13	2															
			P	17	1	47	10	2	2	1	2	2	TR	54									
			P	18	1	48	9	1	2	1	2	2	1	55									

Heat Treatment	Non-Destructive Test (U.T)	Flattering / Bending Test	Visual & Dimension
GOOD	GOOD	GOOD	GOOD

Remark
※1) Type of pipe end(관종)
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) CM3=Cu+Ni+Cr+Mo+V
※ SPEC YEAR - ASTM A53(2018ED)

SURVEYOR

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H.K. CHOI
QA Manager

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