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CONTRACT(P/O) NO.(계약번호) : 28991

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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): 현대종합상사(주)

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. / Max.	※2	Tensile Properties(Gage Length : 2 inch) Tensile Strength Base MPa	Tensile Strength Weld MPa	Yield Strength MPa	Y/R Rate %	E.L %	Hardness Test ※3 Max. Value	※2 ※3	CVN Impact Test Specimen size	CVN Impact Test(℃) Absorbed Energy(Joule) 1	2	3	avg	Shear Area (%)	D.W.T Test(℃) Shear Area(%) 1	2	av
							PSI	SEC	Min.		415	415	240		28			Criteria : In the case of 10×10								
									Max.																	
1	EB BE	24" X 0.375 " X 6150 M	31	26.859	190.65	SU35130	660	5		T	461	471	296		43											
		TOTAL	31	26.859	190.65																					

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	Cooper Sulfate Test Time	Cooper Sulfate Test Result	HC-Test Collapse Pressure	H.I.C Test CLR	CTR	CSR	S.S.C.C Test	Remark
		Min.		2	2	2	3	3	2	2	2	3	3	3					psi	%	%	%		
		Max.		30		120	50	45	40	40	40	150	80	1000										
1	SU35130		H	18	TR	50	10	3																
			P	18	1	49	7	2	1	1	2	30	1	69										
			P	19	1	50	7	2	1	1	2	30	1	69										

※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)

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

본 제품은 관련 규격에 합격되었음을 보증합니다
This material has been manufactured, sampled, tested and inspected in accordance with the specification and has been found to meet the requirements.
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SURVEYOR

H.K. CHOI
QA Manager

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