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 CONTRACT(P/O) NO.(계약번호) : 25598
 PR NO.(주문서번호) : F170600262
 COMMODITY(제품명) : E.R.W. CARBON STEEL PIPE
 SPECIFICATION(제품규격) : ASTM A53 B

검사증명서

MILL TEST CERTIFICATE

EN 10204 TYPE 3.1 - 2004



출산공장 : 울산광역시 북구 염포로 706
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CUSTOMER(고객사): 현대중합상사(주)

No.	TYPE OF PIPE END ※1	SIZE OUT-DIA×THICK×LENGTH (외경×두께×길이)	PCS (본)	WEIGHT (KG)	TOTAL LENGTH (F)	HEAT No.	Hydrostatic Test		Spec. ※2	Tensile Properties(Gage Length : 2 inch)				Hardness Test		Hardness Test & CVN Impact Test					D.W.T Test(°C)					
							Pressure	Time		Tensile Strength		Yield Strength	Y/R Rate	E.L	Max. Value	CVN Impact Test(°C)				Shear Area(%)						
										Base	Weld					1	2	3	avg	Shear Area (%)	1	2	avg			
							PSI	SEC		MPa	MPa	MPa	%	%	※3									Specimen size	Criteria : In the case of 10×10	
1	EB BE	12" X 0.375 " X 20.177 F	13	5,899	262.301	JA128	1236	5	T	417	450	352		46												
2	EB BE	12" X 0.375 " X 20.177 F	1	454	20.177	JA130	1236	5	T	437	460	340		45												
TOTAL			14	6,353	282.478																					

No.	Heat No.	Spec. ※4	Chemical Composition(%)											Zn-Coating Test		HC-Test	H.I.C Test			S.S.C Test	Remark		
			2 : ×100 3 : ×1000 4 : ×10000											Zn Coating	Copper Sulfate Test	CLR	CTR	CSR					
			C	Si	Mn ※7	P	S	Cu	Ni	Cr	Mo	V	CM3 ※10	Time	Result	psi	%	%	%				
			2	2	2	3	3	2	2	2	3	3	3										
1	JA128	H	13		66	12	4																※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(2012ED)
		P	12	TR	65	12	5	1	1	2	2	1	49										
		P	12	TR	65	12	5	1	1	2	2	1	49										
2	JA130	H	13	1	68	10	8																
		P	12	1	66	10	10	2	1	2	2	TR	54										
		P	12	1	66	10	10	2	1	2	2	1	55										

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

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 명기된 규격용도의 사용시 안전상 문제가 발생할 수 있으며, 검사증명서 위.변조시 사문서 위조로 불이익을 당하실 수 있습니다.

SURVEYOR

QA Manager