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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  
 706, Yeampo-ro, Buk-gu, Ulsan, Korea



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									Absorbed Energy(Joule)			
1	EB BE	16" X 0.312" X 20.177 F	143	68,440	2,885.311	G67192	820	5	T	461	474	330		40													
2	EB BE	16" X 0.312" X 20.177 F	24	11,486	484.248	P31997	820	5	T	480	505	377		40													
		TOTAL	167	79,926	3,369,559																						

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	Collapse Pressure	CLR	CTR	CSR								
			C	Si	Mn ※7	P	S	Cu	Ni	Cr	Mo	V	CM3 ※10					Time	Result	psi	%			%	%				
			Min.	Max.																									
1	G67192	H	17	2	68	13	7																						
		P	16	2	68	14	8	5	2	4	6	1	111																
		P	16	2	71	16	10	5	2	4	7	1	116																
2	P31997	H	6	1	75	11	6																						
		P	7	1	74	9	7	2	1	3	4	TR	64																
		P	7	1	75	10	7	2	1	3	3	TR	64																

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.

H.K. CHOI

QA Manager

SURVEYOR