

CERTIFICATE NO.(증서번호) : DCO1903  
 DATE OF ISSUE(발행일자) : 2019-12-04  
 CONTRACT(P/O) NO.(계약번호) : 28891  
 P/NO.(주문서번호) : F191000108  
**COMMON(YEIL) (제철용)**  
**ERW CARBON STEEL PIPE**  
 ASTM A53 B

Page 1 of 1

CUSTOMER(고객사):  
 현대중합상사(주)

# 검사증명서

## MILL TEST CERTIFICATE

### EN 10204 TYPE 3.1 - 2004

HYUNDAI STEEL  
 울산공장 : 울산광역시 북구 영포로 705  
 705, Yeompo-ro, Buk-gu, Ulsan, Korea



No	TYPE OF PIPE END	SIZE	PCS	WEIGHT (KG)	TOTAL LENGTH (M)	HEAT No	Hydrostatic Test			Tensile Properties (Spec Length - 2 inch)				Hardness Test			OAI Impact Test		DWT Test
							Spec	Tr	Ir	Base	Weld	Yield Strength	Tensile Strength	YFR	EL	Max Value	Specimen size	Absorbed Energy(kJ)	
1	EB BE	14" X 0.438" X 6.150 M	46	26,748	282.9	SC07155	1310	5	T	455	458	321			43				
2	EB BE	14" X 0.438" X 6.150 M	32	18,607	196.8	SC09556	1310	5	T	502	510	348			38				
TOTAL			78	45,355	479.7														

**Chemical Composition(%)**  
 2 : x:100 3 : x:1000 4 : x:10000

No	Heat No.	Chemical Composition(%)											
		C	S	Mn	P	S	Cu	N	Cr	Mo	V	CA% *10	
1	SC07155	Max	30		120	50	45	40	40	40	150	80	1000
		H	18	1	80	12	3						
		P	18	1	79	9	2	2	1	2	14	1	68
2	SC09556	Max	30		120	50	45	40	40	150	80	1000	
		H	18	1	79	8	1	2	1	2	14	1	69
		P	18	1	85	11	3	3	2	2	16	1	89

**Head Treatment**  
 Non-Destructive Test: GOOD  
 Ballerby/Bending Test: GOOD  
 Visual & Dimension: GOOD

**REMARK**  
 \*1) Type of pipe end(단종)  
 BE=PM End, BE=Ball End  
 \*2) L: Longitudinal, T: Transverse  
 \*3) B: Base, W: Weld Line, H: Heat Affected Zone  
 \*4) H: Heat(Angle) Analysis, P: Product Analysis  
 \*7) For each reduction of 0.01% below the specified Cmax an increase of 0.05% Mn above the specified max will be permitted up to a max. of 1.65%  
 \*10) CA% = (C+Mn+Cr+Mo+V)  
 \* SPEC YEAR - ASTM A53(B) (BEB)

**본 제철용 강판 규격에 변경되었음을 보증합니다.**  
 The material has been manufactured, sampled, tested and inspected in accordance with the specification and has been found to meet the requirements.  
 \* 본 검사증명서에 영기(영) 규격용도의 사용시 안전을 위하여 항상 열 수 있으며, 검사증명서 및 판조시 시공서 위조로 불이민을 당할 수 있습니다.  
 \* 본 검사증명서는 영본인 전자문서(전자서명 정보 포함) 형태로 출력된 시본입니다. 전자문서의 내용은 원본과 동일하며, 고장포함에서 확인하실 수 있습니다.(http://am.hyundai-steel.com/ctrl/topn.jsp)  
 \* This Mill Test Certificate is a copy that has been printed from original electronic document with digital sign(영).  
 You are able to check an original electronic document at Hyundai's customer portal (http://am.hyundai-steel.com/ctrl/topn.jsp) \* Or code scanner App : 'Oréal'

**QA Manager**  
**J.K. CHOI**