

Contract No.	
Customer	HYUNDAI CORPORATION
L/C No.	
P/O No.	32201601C111
Commodity	H-BEAM
Specification	ASTM A572 G50/A992/CSA G 40.21-13 50WM(345WM)

# INSPECTION CERTIFICATE



Head Office	63, Jungbong-daero, Dong-gu, Incheon, 401-712, S. Korea
Certificate No.	IH20160201768 - 10
Class Cert. No.	
Date of Issue	2016-02-16

EN 10204(2004) TYPE 3.1

Dimensions & Length	Heat No.	Pieces Weights (kg)	Chemical Composition (%)											Tensile Test			Yield Ratio	Impact Test (V-notch)				Remarks (Impact Specimen Size)		
			C	Si	Mn	P	S	Cu Ni	Mo Cr	Al V	Nb	Sn	CE <sup>(1)</sup>	Tensile Strength	Yield point	Elongation <sup>(2)</sup>		AVG	1	2	3			
			x100		x1000		x100		x1000			x100	N/mm <sup>2</sup>		%	( )		°C						
24X9X68 40.00 FT	N 031310	7 8,638	19	14	65	28	11	12	2	3		3	10	35	528	396	27.0	0.75						
24X9X68 40.00 FT	N 031311	6 7,404	19	19	65	24	6	13	1	4		1	9	34	528	396	26.0	0.75						
24X9X68 40.00 FT	N 031312	13 16,042	18	17	64	25	9	15	1	3		1	12	33	538	416	25.5	0.77						
24X9X68 40.00 FT	N 031313	2 2,468	18	19	67	30	8	11	1	3		1	9	33	530	402	26.5	0.76						
24X7X55 40.00 FT	E 187646	8 7,984	13	15	55	28	14	21	2	3		1	15	28	485	379	26.5	0.78						
24X7X55 40.00 FT	E 187647	8 7,984	14	15	56	29	10	25	2	3		3	11	30	550	428	26.0	0.78						
24X7X55 40.00 FT	E 187648	12 11,976	13	15	55	28	11	23	2	3		3	8	28	485	384	27.0	0.79						
24X7X55 40.00 FT	E 187649	7 6,986	14	14	54	30	9	26	2	3		2	9	29	499	409	25.0	0.82						
24X7X55 40.00 FT	E 187650	7 6,986	14	15	53	23	7	20	2	3		2	16	28	491	388	27.5	0.79						
SUB TOTAL		70 76,468																						

(Note) (1) Ceq: (CE=C+Mn/6+Cr/5+V/5+Mo/5+Ni/15+Cu/15) (2) Gauge length : 200 mm (3) Yield Ratio = YP/TS

**J. C. Ahn**  
General Manager of Q.A Team

WE HEREBY CERTIFY THAT THE MATERIAL HAS BEEN MADE AND TESTED IN ACCORDANCE WITH THE ABOVE SPECIFICATION AND ALSO WITH THE REQUIREMENTS CALLED FOR THE ABOVE ORDER