

Contract No.	
Customer	HYUNDAI CORPORATION
L/C No.	
P/O No.	32201601C121
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.	IH20160305487 - 2
Class Cert. No.	
Date of Issue	2016-03-24

EN 10204(2004) TYPE 3.1

Dimensions & Length	Heat No.	Pieces Weights (kg)	Chemical Composition (%)											Tensile Test				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>	Yield Ratio	AVG	1	2	3	
			×100		×1000		×100		×1000			×100	N/mm <sup>2</sup>		%	°C	°C					
8X4X15 40.00 FT	D 132598	24 6,528	18	18	57	20	10	27 9	2 14	4 1	14	14	33	531 522	421 413	24.0 24.5	0.79 0.79					
12X4X14 40.00 FT	D 132533	12 3,048	18	16	57	25	8	25 10	2 20	2 3	16	12	34	550 547	420 418	25.5 26.0	0.76 0.76					
12X4X14 40.00 FT	D 132543	36 9,144	18	14	59	21	7	26 9	2 13	2 2	17	11	33	538 532	414 412	24.0 25.5	0.77 0.77					
12X4X19 40.00 FT	D 132434	50 17,250	16	16	59	25	5	29 9	1 20	3 2	15	14	33	567 561	434 427	26.0 26.5	0.76 0.76					
12X4X19 40.00 FT	D 132435	20 6,900	16	12	63	20	10	27 8	1 17	2 3	17	15	32	534 529	448 440	26.0 26.5	0.84 0.83					
12X4X22 40.00 FT	D 132533	30 11,970	18	16	57	25	8	25 10	2 20	2 3	16	12	34	545 540	425 420	24.0 24.5	0.78 0.78					
12X6-1/2X30 40.00 FT	D 132567	30 16,320	16	14	64	23	12	22 10	2 23	2 3	16	11	34	522 523	391 392	26.0 26.5	0.75 0.75					
12X6-1/2X30 40.00 FT	D 132568	6 3,264	17	16	64	19	7	25 10	2 16	3 5	24	12	34	523 518	393 388	25.0 26.0	0.75 0.75					
12X6-1/2X35 40.00 FT	D 132557	48 30,480	16	16	61	18	4	26 8	1 18	4 2	17	14	32	505 502	384 381	25.5 26.0	0.76 0.76					
SUB TOTAL		256 104,904																				

(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