


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

EN 10204(2004) TYPE 3.1

		63, Jungbong-daero, Dong-gu, Incheon, 401-712, S. Korea
Head Office		
Certificate No.	IH20160305386 - 3	
Class Cert. No.		
Date of Issue	2016-03-24	

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						
14X5X26 40.00 FT	D 132765	20 9,440	17	14	57	27	5	28 9	2 17	3 1	16	13	33	536 532	393 390	25.5 25.0	0.73 0.73							
14X5X26 40.00 FT	D 132766	20 9,440	18	15	57	18	5	20 8	2 11	4 1	16	9	32	544 541	408 405	24.0 24.5	0.75 0.75							
21X6-1/2X44 40.00 FT	E 179994	20 15,960	14	16	54	23	11	27 8	2 15	4 12	6	12	29	516 508	423 418	27.5 27.5	0.82 0.82							
21X6-1/2X44 40.00 FT	E 187811	1 798	13	16	55	27	8	33 8	2 14	4 11	4	17	28	510 513	402 406	26.5 26.0	0.79 0.79							
21X6-1/2X44 40.00 FT	E 187815	2 1,596	14	18	55	21	14	25 8	2 14	4 11	1	13	29	497 491	393 379	27.0 27.5	0.79 0.77							
21X12-1/4X111 40.00 FT	N 031825	10 20,140	18	14	98	23	9	25 9	2 16	3 16	5	12	41	553 552	390 389	26.0 27.0	0.70 0.70							
21X12-1/4X111 40.00 FT	N 031826	2 4,028	18	17	96	22	4	19 8	2 18	4 16	2	9	40	556 552	389 386	26.5 27.0	0.70 0.70							
21X12-1/4X122 40.00 FT	N 031820	7 15,491	18	16	98	25	6	21 9	3 20	3 15	2	9	41	566 546	404 401	25.0 25.5	0.71 0.73							
21X12-1/4X122 40.00 FT	N 031821	9 19,917	18	14	96	26	8	25 9	3 20	3 15	2	15	41	562 559	385 383	25.0 25.5	0.68 0.68							
SUB TOTAL		91 96,810																						
TOTAL		962 373,370	===== E N D =====																					

(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