

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



Head Office	63, Jungbong-daero, Dong-gu, Incheon, 401-712, S. Korea
Certificate No.	IH20160201768 - 4
Class Cert. No.	
Date of Issue	2016-02-16

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 ⁽¹⁾	Tensile Strength	Yield point	Elongation ⁽²⁾		AVG	1	2	3	
			×100		×1000		×100		×1000		×100	N/mm ²		%	()	°C						
12X8X45 40.00 FT	E 187578	2 1,632	19	17	64	25	6	19 8	2 13	4 14	1	8	35	576 571	443 442	22.5 22.0	0.77 0.77					
12X8X50 40.00 FT	E 187579	12 10,884	18	14	69	30	10	19 8	2 17	2 15	2	10	35	528 524	382 378	25.0 25.5	0.72 0.72					
12X8X50 40.00 FT	E 187580	19 17,233	19	15	65	25	9	19 10	2 14	3 15	1	11	35	518 514	378 374	25.5 26.0	0.73 0.73					
12X8X50 40.00 FT	E 187581	5 4,535	18	15	65	22	8	18 8	2 14	3 14	1	7	34	511 508	373 370	26.5 27.0	0.73 0.73					
14X6-3/4X30 40.00 FT	D 132249	5 2,720	17	23	63	27	6	23 8	2 15	4 3	20	9	33	538 535	391 387	25.0 26.0	0.73 0.72					
14X6-3/4X30 40.00 FT	D 132253	16 8,704	16	16	59	28	8	28 9	2 17	3 2	15	11	32	535 534	412 411	25.0 25.5	0.77 0.77					
14X6-3/4X30 40.00 FT	D 132254	60 32,640	18	16	59	27	8	28 9	2 14	3 2	15	12	34	534 530	401 406	25.0 25.0	0.75 0.77					
14X6-3/4X30 40.00 FT	D 132255	35 19,040	17	16	58	26	6	32 10	2 15	3 2	15	11	33	530 529	414 405	25.0 26.0	0.78 0.77					
14X6-3/4X30 40.00 FT	D 132256	25 13,600	16	15	57	26	5	26 8	1 12	3 2	16	10	30	525 527	394 398	25.0 24.5	0.75 0.76					
SUB TOTAL		179 110,988																				

(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