

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.	IH20160201769 - 5
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			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⁾	Yield Ratio	AVG	1	2		3	
			×100			×1000		×100		×1000			×100		N/mm ²		%		([°])	C			
14X14-1/2X90 40.00 FT	N 031446	2 3,264	18	15	99	27	9	19 8	2 14	3 16		3	16	40	552 549	396 391	24.5 24.5	0.72 0.71					
14X14-1/2X90 40.00 FT	N 031447	1 1,632	18	16	98	31	10	23 9	3 21	3 16		2	19	42	559 560	398 400	25.5 25.0	0.71 0.71					
14X14-1/2X90 40.00 FT	N 031448	1 1,632	18	16	97	26	9	22 9	2 15	3 15		2	10	40	546 549	389 392	28.5 28.0	0.71 0.71					
14X14-1/2X90 40.00 FT	N 031449	2 3,264	18	18	98	30	10	20 8	2 16	3 16		3	9	40	555 552	390 386	26.5 27.0	0.70 0.70					
16X5-1/2X26 40.00 FT	D 132110	45 21,240	16	14	59	30	6	20 8	2 15	3 2		14	12	31	529 534	400 403	24.5 24.0	0.76 0.76					
16X7X36 40.00 FT	E 187774	1 653	13	14	54	27	10	24 7	2 19	3 12		2	12	29	495 497	402 404	26.0 27.0	0.81 0.81					
16X7X36 40.00 FT	E 187775	5 3,265	14	14	52	31	10	23 7	2 19	3 14		2	10	29	505 509	418 425	26.0 26.5	0.83 0.84					
16X7X36 40.00 FT	E 187776	5 3,265	15	13	52	20	12	22 8	2 16	2 13		2	11	30	502 503	400 401	27.0 27.5	0.80 0.80					
16X7X36 40.00 FT	E 187777	5 3,265	15	15	52	23	7	23 8	2 18	3 13		3	12	30	504 501	404 408	26.5 27.0	0.80 0.81					
SUB TOTAL		67 41,480																					

(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