Contract No.	
Customer	HYUNDAI CORPORATION
L/C No.	
P/O No.	32201610C321
Commodity	H-BEAM
Specification	ASTM A572 G50/A992/CSA G 40.21-13 50WM(345WM)

INSPECTION CERTIFICATE

EN 10204(2004) TYPE 3.1

HYUNDAI STEEL

Head Office	63, Jungbong-daero, Dong-gu, Incheon,22525, S. Korea
Certificate No.	IH20161104367 - 1
Class Cert. No.	
Date of Issue	2016-11-22

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)	Tenslie Strength	Yield point	Elongation(2)		AVG	1	2	3	
			×100			×1000		×100		×1000			×100	N/mm²		%		(˚)	˚c			
18X7-1/2X55 40.00 FT	E 193483	14 / 13,972	18	18	93	25	8	24 / 8	2 / 14	4 / 14	2	14	39	559 / 552	405 / 401	26.0 / 26.5	0.72 / 0.73					
18X7-1/2X55 40.00 FT	E 193484	25 / 24,950	18	16	96	24	8	27 / 10	2 / 13	4 / 15	4	13	40	564 / 554	408 / 402	25.0 / 26.0	0.72 / 0.73					
18X7-1/2X55 40.00 FT	E 193485	34 / 33,932	19	16	96	30	6	27 / 7	1 / 17	4 / 15	3	17	41	583 / 576	422 / 419	24.0 / 24.5	0.72 / 0.73					
18X7-1/2X55 40.00 FT	E 193486	4 / 3,992	19	17	98	31	7	27 / 8	2 / 18	4 / 14	2	12	42	572 / 567	415 / 409	24.5 / 26.0	0.73 / 0.72					
12X12X72 40.00 FT	E 191909	3 / 3,918	20	17	95	28	9	26 / 8	2 / 11	4 / 15	5	13	41	558 / 550	385 / 382	25.0 / 25.5	0.69 / 0.70					
12X12X72 40.00 FT	E 193247	5 / 6,530	18	15	96	24	9	24 / 9	2 / 16	3 / 16	5	9	40	555 / 552	399 / 395	25.0 / 26.5	0.72 / 0.72					
12X12X72 40.00 FT	E 193248	7 / 9,142	20	15	96	25	6	24 / 9	2 / 15	3 / 15	4	10	42	551 / 553	388 / 390	26.5 / 27.0	0.70 / 0.71					
14X10X68 40.00 FT	E 193441	4 / 4,936	19	15	97	19	8	25 / 8	2 / 10	3 / 14	4	10	40	554 / 549	397 / 394	28.0 / 29.5	0.72 / 0.72					
14X10X68 40.00 FT	E 193442	12 / 14,808	18	15	95	17	10	25 / 8	2 / 10	3 / 13	3	10	39	538 / 535	380 / 376	26.5 / 27.0	0.71 / 0.70					
SUB TOTAL		108 / 116,180																				

(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