

Contract No.	
Customer	HYUNDAI CORPORATION
L/C No.	
P/O No.	32201610C311
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, 22925, S. Korea
Certificate No.		IH20161104366 - 5
Class Cert. No.		
Date of Issue		2016-11-22

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	Nb	Sh	CE(1)	Tensile Strength	Yield point	Elongation(2)	Yield Ratio		AVG	1	2	3		
			x100	x100	x1000	x1000	x1000	x100	x100	x100	x100	x1000	x1000	x1000	x100	N/mm ²	N/mm ²	%	(%)		(%)	(%)	(%)	(%)	(%)	
21X8-1/4X68 40.00 FT	E 193120	31 38,254	18	17	99	26	7	24	8	18	15	7	15	41	562	406	26.0	0.72								
21X8-1/4X68 40.00 FT	E 193121	34 41,956	19	20	99	30	4	27	2	6	16	5	13	42	562	406	26.0	0.72								
21X8-1/4X68 40.00 FT	E 193122	9 11,106	18	16	98	28	9	28	1	4	15	5	12	41	559	411	27.0	0.74								
21X8-1/4X83 40.00 FT	E.193079	4 6,024	19	16	96	28	8	28	2	4	13	3	9	42	562	401	27.0	0.71								
21X8-1/4X83 40.00 FT	E 193117	29 43,674	18	18	98	29	5	26	2	4	14	4	9	41	566	402	26.5	0.71								
21X8-1/4X83 40.00 FT	E 193118	19 28,614	18	15	95	26	10	24	2	3	15	4	8	40	557	401	26.5	0.72								
21X12-1/4X101 40.00 FT	N 034481	14 25,648	19	19	102	27	4	20	3	8	15	5	12	42	544	380	28.5	0.70								
21X12-1/4X101 40.00 FT	N 034482	28 51,296	18	14	91	31	8	26	3	4	14	4	10	41	548	388	26.0	0.70								
21X12-1/4X111 40.00 FT	N 034336	6 12,084	20	15	96	28	13	21	2	3	16	4	15	42	553	390	26.5	0.71								
SUB TOTAL		174 258,656																								

(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