



Head Office  
63, Jungbong-daero, Dong-gu,  
Incheon, 22525, S. Korea

Certificate No.  
IH20161104367 - 5

Class Cert. No.

Date of issue  
2016-11-22

# INSPECTION CERTIFICATE

EN 10204(2004) TYPE 3.1

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 50MM(34.5WM)

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	Mo	Al	Nb	Sn	CE(1)	Tensile Strength	Yield point	Elongation(2)	Yield Ratio	AVG	1	2	3				
			x100	x100	x1000	x1000	x1000	x100	x100	x1000	x1000	x1000	x100	N/mm <sup>2</sup>	%	%	(%)	(%)	(%)	(%)	(%)		(%)		
21X12-1/4X122 40.00 FT	N 034480	5 11,065	18	14	94	21	5	23	8	16	14	3	4	12	40	550	381	27.0	0.69						
21X12-1/4X122 40.00 FT	N 034481	4 8,852	19	19	102	27	4	20	3	8	15	3	8	5	42	543	382	27.0	0.70						
24X9X68 40.00 FT	N 034345	1 1,234	19	15	65	26	10	8	15	14	3	3	20	36	528	382	26.0	0.72							
24X9X68 40.00 FT	N 034346	1 1,234	18	17	64	23	8	29	2	3	14	3	11	34	535	385	25.5	0.72							
24X9X68 40.00 FT	N 034347	1 1,234	18	15	63	24	11	24	2	3	14	3	4	34	519	375	26.5	0.72							
24X9X68 40.00 FT	N 034794	1 1,234	18	15	65	24	10	22	2	2	13	3	10	34	520	405	27.0	0.78							
24X9X68 40.00 FT	N 034795	5 6,170	18	17	64	25	8	18	2	4	13	2	11	34	518	395	28.0	0.76							
24X9X68 40.00 FT	N 034799	12 14,808	18	17	60	32	7	26	2	4	12	2	15	35	524	413	26.0	0.79							
24X9X68 40.00 FT	N 034800	15 18,510	18	18	65	27	13	23	2	4	14	4	12	36	520	399	28.0	0.77							
SUB TOTAL		45 64,341														527	408	27.5	0.78						

(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 O.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