

ORIGINAL

Contract No.	SPS20180305-HJ1
Customer	
PO No.	32201803C211
L/C No.	
Commodity	WIDE FLANGE BEAM
Specification	HOT ROLLED WIDE FLANGE BEAM ASTM A572 G50/A992/CSA G4021-13 50MM(345MM) PARA MATERIAL DE VIGA

HYUNDAI STEEL	
Factory	63, Jungbong-Daero, Dong-gu, Incheon, S. Korea
Certificate No.	IH20180502996-1
Class certificate No.	
Issue date	2018-05-18

INSPECTION CERTIFICATE
EN 10204(2004) TYPE 3.1

PAGE: [1 / 2]

Dimensions	Length	Heat No.	Quantity (PCS)	Weight (kg)	Chemical Composition													Tensile Test			Yield Ratio ⁽³⁾	BEND TEST	Impact Test(L)			Remarks (Impact Specimen Size)						
					x100					x1000					Sn	CE ⁽¹⁾	x100	Tensile Strength	Yield Strength	Elongation ⁽²⁾			%	V-Notch								
					C	Si	Mn	P	S	Cu	Ni	Mo	Cr	Al										V	Nb		Strength	Strength	(%)	AVG	1	2
12X12X87	40.00 FT	E 202524	1	1,579	19	17	96	21	9	26	9	1	14	3	14	2	11	41	566	396	25.0	0.700										
12X12X87	40.00 FT	E 203290	2	3,158	18	17	94	22	8	22	10	1	21	4	14	1	18	40	567	392	25.5	0.692										
12X12X87	40.00 FT	E 203764	12	18,948	19	16	98	24	7	21	8	2	10	3	14	3	9	40	549	414	27.5	0.755										
14X14-1/2X99	40.00 FT	N 042585	9	16,164	19	14	98	25	9	21	10	2	13	5	13	5	8	41	553	411	25.0	0.744										
14X14-1/2X99	40.00 FT	N 042586	9	16,164	17	17	94	23	11	29	10	2	14	4	14	2	11	39	559	388	25.0	0.695										
18X11X119	40.00 FT	N 042145	10	21,590	17	15	113	21	10	23	8	2	8	3	15	3	13	40	562	384	25.0	0.684										
24X12-3/4X104	40.00 FT	N 042522	3	5,661	18	20	96	10	3	22	11	2	12	21	14	4	11	39	550	407	25.5	0.740										
24X12-3/4X104	40.00 FT	N 042525	1	1,887	19	15	95	17	12	25	10	2	9	3	14	2	13	40	544	409	26.5	0.739										
24X12-3/4X104	40.00 FT	N 042530	12	22,644	18	18	95	22	10	19	9	2	14	4	15	4	8	39	538	365	28.0	0.679										
24X12-3/4X104	40.00 FT	N 042531	3	5,661	18	15	94	25	10	21	8	2	17	3	15	3	14	40	547	421	26.0	0.770										
SUB TOTAL			62	113,456																												

***** N E X T *****

Note
(1) Ceq: (C+Mn)/6+Cr/5+V/5+Mo/5+Ni/15+Cu/15
(2) Gauge length : 200 mm
(3) Y.R = Y.S/1.5

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.

J. E. Han

General Manager of Q.A Team

