

Contract No.	
Customer	HYUNDAI CORPORATION
PO No.	32201705CP14
L/C No.	
Commodity	H-BEAM
Specification	HOT ROLLED WIDE FLANGE BEAM ASTM A572 G50/A992/CSA G 402L-33 50MM(345MM) PARA MATERIAL DE VIGA

INSPECTION CERTIFICATE
EN 10204(2004) TYPE 3.1



PAGE: 1 / 2

Factory	63, Jungbong-Daero, Dong-gu, Incheon, S. Korea
Certificate No.	IH20170702480-1
Class certificate No.	
Issue date	2017-07-17

Dimensions	Length	Heat No.	Quantity (PCS)	Weight (kg)	Chemical Composition													Tensile Test		BEND TEST			Impact Test(L)			Remarks (Impact Specimen Size)				
					x100			x1000			x1000			x100			Yield Strength N/mm ²	Elongation (%)	Yield Ratio(%)	V-Notch			Temp °C							
					C	Si	Mn	P	S	Cu	Ni	Mo	Cr	Al	V	Nb				Sn	CE _{eq}	AVG		1	2		3			
4X4X13	40.00 FT	D 141292	12	2,832	17	16	59	25	8	36	10	2	17	3	2	15	15	34	527	384	250	0.73								
4X4X13	40.00 FT	D 141293	84	19,824	16	17	56	22	6	31	11	2	11	3	2	14	13	31	522	378	255	0.72								
6X6X20	40.00 FT	D 141167	8	2,904	16	14	59	25	6	34	9	1	21	4	3	16	12	33	519	382	250	0.74								
6X6X20	40.00 FT	D 141184	24	8,712	17	14	62	11	9	32	9	1	7	3	2	15	14	32	512	381	255	0.74								
10X5-3/4X26	40.00 FT	D 141412	32	15,104	18	14	58	29	10	36	10	2	20	3	3	16	20	35	523	380	260	0.73								
10X5-3/4X26	40.00 FT	D 141413	8	3,776	18	14	58	30	10	40	10	2	22	4	2	16	19	36	520	377	265	0.72								
10X10X49	40.00 FT	E 197959	24	21,336	18	16	65	28	6	27	9	2	18	4	17	3	17	36	510	375	240	0.74								
14X6-3/4X34	40.00 FT	E 198423	33	20,361	13	15	52	23	6	26	9	2	11	4	12	1	13	27	495	368	240	0.74								
14X6-3/4X34	40.00 FT	E 198424	2	1,234	13	13	56	29	11	28	11	2	14	3	12	3	19	28	493	365	245	0.74								
14X8X48	40.00 FT	E 198524	29	25,259	18	16	64	26	9	28	9	1	12	3	14	4	12	34	522	387	285	0.74								
SUB TOTAL			256	121,342															544	392	240	0.72								

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

Note

- (1) CE_{eq} = C+Mn/6+Cr/5+V/5+Mo/5+Ni/15+Cu/15
- (2) Gauge length : 200 mm
- (3) Y.R = Y.S/7.5

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. C. Ahn

General Manager of Q.A Team
HMS I.102(A)-3a A4(210x297)

2017.07.19.08:50:17

2015059

Barcode scanner App : "Qreal"



INSPECTION CERTIFICATE

EN 10204(2004) TYPE 3.1

Factory: 63, Jungbong-Daero, Dong-gu, Incheon, S. Korea

Certificate No. IH20170702480-2

Class certificate No.

Issue date: 2017-07-17

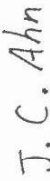
Contract No.	
Customer	HYUNDAI CORPORATION
PO No.	32201705CP14
L/C No.	
Commodity	H-BEAM
Specification	HOT ROLLED WIDE FLANGE BEAM ASTM A572 G50/A992/CSA G 40.21-13 50MM(345MM) PARA MATERIAL DE VIGA

Dimensions	Length	Heat No.	Quantity (PCS)	Weight (kg)	Chemical Composition													Tensile Test		Impact Test(L)			Remarks (Impact Specimen Size)						
					C	Si	Mn	P	S	Cu	Ni	Mo	Cr	Al	V	Nb	Sn	CE _{tot}	Tensile Strength	Yield Ratio ⁽³⁾	V-Notch	1		2	3				
																										N	1000	x100	x1000
14X8X48	40.00 FT	E 198525	3	2,613	19	14	66	28	9	32	9	1	9	3	15	3	16	35	547	401	24.0								
14X8X48	40.00 FT	E 198528	4	3,484	18	14	64	19	8	26	8	1	10	4	14	2	23	33	545	398	24.5								
16X7X40	40.00 FT	E 197835	45	32,670	18	18	65	24	7	27	8	2	10	4	13	3	13	34	533	398	26.0								
18X11X86	40.00 FT	N 037727	2	3,122	18	14	94	25	9	28	9	2	15	3	13	3	13	40	531	392	27.0								
18X11X86	40.00 FT	N 037728	13	20,293	19	15	97	26	6	31	10	2	14	4	14	5	15	41	542	413	26.5								
18X11X86	40.00 FT	N 037729	6	9,366	18	14	94	27	8	28	11	2	18	3	14	3	14	41	554	432	25.5								
18X11X119	40.00 FT	N 037444	3	6,477	17	20	114	25	10	27	7	1	15	4	15	5	13	42	565	430	26.0								
18X11X119	40.00 FT	N 037701	1	2,159	17	18	113	25	10	24	9	2	16	4	14	2	13	42	559	378	26.0								
18X11X119	40.00 FT	N 037702	2	4,318	17	19	112	21	9	26	8	2	10	3	15	3	12	41	554	375	26.5								
18X11X119	40.00 FT	N 037703	9	19,431	18	17	112	29	13	27	9	2	12	3	15	2	15	42	560	390	27.0								
TOTAL			344	225,275																									

===== END =====

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

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.


 General Manager of QA Team