

PO#: P0242728-15 Part: W1209640\* Qty: 1 Heat#: n063658\* Tag: B11071223 Date: 7/13/2023 To: SENTRY SUPPLY dba SO#: A772588 Ln#: 1

Contract No.	
PO No.	55W128452
L/C No.	
Commodity	H-BEAM
Specification	ASTM A572 G50/A592/CSA G40.21-13 50W12845MM

**INSPECTION CERTIFICATE**

EN 10204(2004) TYPE 3.1

<b>HYUNDAI STEEL</b>	
Factory	63, Jungbong-Deero, Dong-gu, Incheon, S. Korea
Certificate No.	IH20220803778-7
Class certificate No.	
Issue date	2022-08-19

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Dimensions	Length	Heat No.	Quantity (PCS)	Weight (kg)	Chemical Composition													Tensile Test			Impact Test(I)			Remarks (Impact Specimen Size)		
																		Yield Ratio	V-Notch							
					C	Si	Mn	P	S	Cu	Ni	Mo	Cr	Al	V	Nb	N		CE <sub>T</sub>	Tensile Strength	Yield Strength	%	AVG		1	2
12X12X87	60.00 FT	N 063660	3	7,104	18	15	94	19	9	24	9	2	14	3	14	2	151	39	380	27.6	0.677					
12X12X96	40.00 FT	N 063653	3	5,226	19	12	95	23	8	23	7	2	8	3	13	2	104	39	406	28.2	0.725					
12X12X96	40.00 FT	N 063654	2	3,484	18	19	93	24	7	21	8	2	10	4	13	2	102	38	381	25.6	0.694					
12X12X96	40.00 FT	N 063655	1	1,742	18	17	94	22	5	26	8	3	11	4	15	2	100	39	362	26.8	0.654					
12X12X96	40.00 FT	N 063658	3	5,226	17	16	95	28	4	20	8	2	12	4	13	2	96	38	379	25.3	0.697					
12X12X96	50.00 FT	N 063655	3	6,534	18	17	94	22	5	26	8	3	11	4	15	2	100	39	361	26.1	0.669					
12X12X96	50.00 FT	N 063657	3	6,534	18	16	93	28	6	19	7	2	9	4	13	1	111	38	376	26.8	0.673					
14X5X22	35.00 FT	D 173932	5	1,745	15	13	60	26	10	27	10	2	20	2	2	16	96	32	377	25.0	0.687					
14X5X22	35.00 FT	D 173933	54	18,846	18	13	63	18	10	23	10	2	12	2	2	16	103	34	369	25.3	0.676					
14X5X22	40.00 FT	D 173929	65	25,935	16	16	61	19	6	23	9	3	11	3	1	16	97	31	408	26.8	0.752					
<b>SUB TOTAL</b>			<b>142</b>	<b>82,376</b>															<b>407</b>	<b>25.6</b>	<b>0.740</b>					

Note: Melted and Poured in Republic of Korea

(1) Ceq: (C+V+Mo)/5 + (Cu+Ni)/15 + Mn/6  
 (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.


*J. C. Han*

General Manager of QA Team

This test report can be verified the authenticity to scan the top-right QR code via 'Qreal' mobile app. 2022.08.29.16:11:09 HMS I 102(A)-3a A4(2)0297

Date: 7/13/2023 To: SENTRY SUPPLY dba SO#: A772588 Ln#: 1  
 PO#: P0242728-15 Part: W1209640\* Qty: 1 Heat#: n063653\* Tag: B11071223

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Factory: 63, Jungbong-Deero, Dong-gu, Incheon, S. Korea  
 Certificate No. IH20220803778-7  
 Class certificate No.  
 Issue date: 2022-08-19

**INSPECTION CERTIFICATE**  
 EN 10204(2004) TYPE 3.1

Contract No.	
PO No.	SSW12B452
L/C No.	
Commodity	H-BEAM
Specification	ASTM A572 GR50/A592/CSA G4021-13 50Wx134x9MM

Dimensions	Length	Heat No.	Quantity (PCS)	Weight (kg)	Chemical Composition													Tensile Test		Impact Test(I)			Remarks (Impact Specimen Size)		
					x1000													Yield Strength N/mm <sup>2</sup>	Elongation %	Yield Ratio	V-Notch				
					C	Si	Mn	P	S	Cu	Ni	Mo	Cr	Al	V	Nb	N				CEq	AVG		1	2
12X12X87	60.00 FT	N 063660	3	7,104	18	15	94	19	9	24	9	2	14	3	14	2	151	39	562	27.6	0.677				
12X12X96	40.00 FT	N 063653	3	5,226	19	12	95	23	8	23	7	2	8	3	13	2	104	39	560	28.2	0.725				
12X12X96	40.00 FT	N 063654	2	3,484	18	19	93	24	7	21	8	2	10	4	13	2	102	38	549	25.6	0.694				
12X12X96	40.00 FT	N 063655	1	1,742	18	17	94	22	5	26	8	3	11	4	15	2	100	39	554	25.3	0.697				
12X12X96	40.00 FT	N 063658	3	5,226	17	16	95	28	4	20	8	2	12	4	13	2	96	38	560	26.8	0.673				
12X12X96	50.00 FT	N 063655	3	6,534	18	17	94	22	5	26	8	3	11	4	15	2	100	39	549	26.6	0.702				
12X12X96	50.00 FT	N 063657	3	6,534	18	16	93	28	6	19	7	2	9	4	13	1	111	38	549	25.5	0.682				
14X5X22	35.00 FT	D 173932	5	1,745	15	13	60	26	10	27	10	2	20	2	2	16	96	32	559	25.4	0.659				
14X5X22	35.00 FT	D 173933	54	18,846	18	13	63	18	10	23	10	2	12	2	2	16	103	34	560	25.0	0.687				
14X5X22	40.00 FT	D 173929	65	25,935	16	16	61	19	6	23	9	3	11	3	1	16	97	31	551	26.3	0.739				
<b>SUB TOTAL</b>			<b>142</b>	<b>82,376</b>																					

Note  
 (1) Ceq: (C+Cr+V+Mo)/5+(Cu+Ni)/15+Mn/6  
 (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 Q.A Team

This test report can be verified the authenticity to scan the top-right QR code via 'Qreal' mobile app.

2022.08.29.16:01:09  
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