



Steel Dynamics, Inc.

Long Products Group
Structural and Flat Division

(260) 625-8100 (260) 625-8950 FAX

**Quality Steel 100% EAF Melted
and Manufactured in the USA**

Recycled content: PC = 75.0%, PI = 22.0%

ISO 9001:2015 and ABS Certified

CMTR complies with EN 10204 3.1.

CERTIFIED MILL TEST REPORT

Ship to:

Bill to:

Printed: 07 / 24 / 2019

Produced: 07 / 22 / 2019

GENERAL INFORMATION		SPECIFICATIONS		SHIPMENT DETAILS
		Standards	Grades*	BOL # 0000557774 - 7596.00 lbs
Product	Wide Flange Beam	ASTM A6/A6M - 17a		
Size	W14X211	ASTM A992/A992M - 11	A992 / A992M	
	W360X314	ASTM A572/A572M - 18	A572 gr50/gr345	
Heat Number	A166538	ASTM A709/A709M - 17e1	A709 gr50/gr345	
Condition(s)	As-Rolled	AASHTO M270/M270 - 15	M270 gr345/gr50	
	Fine Grained	CSA G40.21-13	50WM/345WM	
	Fully Killed	ASTM A36/A36M - 14	A36 / A36M	
	No Weld Repair	*SDI-MULTI meets the requirements of ASTM A992, A572-50, A529-50, A709-50, M270-50, A36, A709-36, M270-36, CSA300W, CSA345WM, CSA350W		
				Bundle / ASN # Length pcs Cust PO Job/Reference 022707062 36' 0" 1 1901 (5.13)

CHEMICAL ANALYSIS (weight percent)

C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	V	Nb/Cb	Al	N	B	*C1	*C2	*C3	*PC	*I	Analysis Type
.08	1.36	.013	.021	.22	.42	.12	.15	.04	.013	.066	.001	.003	.0138	.0004	.39	.431	.34	.20	5.84	Heat,

MECHANICAL TESTING

Test	Yield (fy) Strength ksi / MPa	Tensile (fu) Strength ksi / MPa	fy / fu ratio	% Elong. (8" gage)
1	54 / 370	72 / 495	.74	22
2	56 / 400	73 / 505	.79	25
3				
4				

CHARPY IMPACT TESTS (available only when specified at time of order)

Test	Temp F / C	Absorbed Energy ft-lbf / J	Specimen 1	Specimen 2	Specimen 3	Average	Minimum
1							
2							
3							
4							
5							
6							
7							

Notes: *Calculated Chemistry Values: Carbon Equivalents (C1, C2, C3, PC), Corrosion Index (R) (ASTM G101) = 25.01(Cu) + 3.55(N) + 1.20(Cr) + 1.45(Si) + 17.29(P) + 7.29(Cu)(Ni) + 9.10(Ni)(P) + 33.39(Cu)
CE1 (IIR) = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15 CE2 (AWS) = C + (Mn + Si)/5 + (Cr + Mo + V)/5 + (Ni + Cu)/15 CE3 (CET) = C + (Mn/6) + (Si/24) + (Cr/5) + (Ni/40) + (Mo/4) + (V/14)
Pcm(AWS) = C + Si/30 + Mn/20 + Cu/20 + Ni/60 + Cr/20 + mo/15 + V/10 + Sb

I hereby certify that the material described herein has been made to the applicable specification by the electric arc furnace/continuous cast process and tested in accordance with the requirements of American Bureau of Shipping Rules with satisfactory results.

Signed:

ABS CERTIFICATION

I hereby certify that the content of this report are accurate and correct. All tests and operations performed by this material manufacturer are in compliance with the requirements of the material specifications and applicable purchaser designated requirements.

State of Indiana, County of Whitley Sworn to and subscribed before me

this _____ day of _____

Signed:

Todd Bashford

Todd Bashford

Signed:

Notary Public

My commission expires:

Form F-5100-002-054 rev 8 Quality Manager

ASTM A6 - 14.6: A signature is not required on the test report; however, the document shall clearly identify the organization submitting the report. Notwithstanding the absence of a signature, the organization submitting the report is responsible for the content of the report