

Quality Steel 100% EAF Melted and Manufactured in the USA  
 O 9001:2015 and ABS Certified  
 NTR complies with EN 10204 3.1.

GENERAL INFORMATION		SPECIFICATIONS		SHIPMENT DETAILS	
Product	Wide Flange Beam	Standards	Grades*	BOL #	0000733476 - 8480.00 lbs
Size	W14X53	ASTM A616/A617 - 21		Bundle / ASN #	061724313
	W360X79	» ASTM A992/A992M - 20	A992 / A992M	Length	40' 0"
Heat Number	B215599	ASTM A572/A572M - 21	A572 gr50/gr345	pcs	4
Condition(s)	As-Rolled	ASTM A709/A709M - 21	A709 gr50/gr345	Cust PO	SSW130407
	Fine Grained	AASHTO M270/M270 - 20	M270 gr345/gr50	Job/Ref	
	Fully Killed	CSA G40.21-13	50WM/345VM	Part/Ref	
	No Weld Repair	ASTM A36/A36M - 19	A36 / A36M		

CHEMICAL ANALYSIS (Weight Percent)																			
C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	V	Nb/Cb	Al	N	B	*CE1	*CE2	*CE3	*I	Analysis Type
.07	1.24	.013	.026	.28	.36	.11	.11	.04	.014	.033	<.001	.003	.0063	.0002	.34	.391	.30	5.93	Heat

MECHANICAL TESTING									
Test	Yield (fy) Strength	ksi / MPa	Tensile Strength	ksi / MPa	fy / fu ratio	% Elong. (8" gage)	Temp	Absorbed Energy	ft-lbf / J
1	54 / 370	77 / 530	.71	22	1	2	3	4	5
2	59 / 405	77 / 530	.76	27	3	4	5	6	7

CHARPY IMPACT TESTS (available only when specified at time of order)									
Test	Temp	F / C	Specimen 1	Specimen 2	Specimen 3	Average	Minimum		

**Notes:** \* Calculated Chemistry Values: Carbon Equivalents (C1, C2, C3, PC), Corrosion Index (I) (ASTM G101)= 26.0\*(C<sub>1</sub>+3.88(Ni)+1.20(Cr)+1.49(Si)+17.24(P)+7.28(Cu)(Ni)+9.10(Ni)(P)-33.39(Cu)<sup>2</sup>)  
 Z1 (I<sub>1</sub>)=C+Mn/6+Cr+Ni/5+V/5+(Ni+Cu)/15 C2 (AWS)=C+Mn+Si/6+Cr+Ni/5+V/5+(Ni+Cu)/15 C3 (CEI)= C + (Mn/8) + (Si/24) + (Cr/5) + (Ni/40) + (Mo/4) + (V/14)  
 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: \_\_\_\_\_

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.  
 Signed: \_\_\_\_\_

State of Indiana, County of Whitley Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_

Signed: **Valoree Varick**  
 Quality Manager  
 My commission expires: \_\_\_\_\_  
 Notary Public