

ACL 009916

**CERTIFIED MILL TEST REPORT**

100% MELTED AND MANUFACTURED IN U.S.A.  
All shapes produced by Nucor-Yamato Steel are cast and rolled to a fully killed and fine grain practice.

DATE	9/29/11
INVOICE NO.	435578
BILL OF LADING	38980
CUSTOMER NO.	0829
CUSTOMER P.O.	4500081814

**NUCOR-YAMATO STEEL CO.**  
P.O. BOX 1228 • BLYTHEVILLE, AR 72316

S  
H  
I  
P  
T  
O  
  
FORTACERO C/O GULF PORT MARINE  
PORT OF BROWNSVILLE  
  
BROWNSVILLE, IX

S  
P  
E  
C  
I  
F  
I  
C  
A  
T  
I  
O  
N  
S  
  
ASTM A992/A992M-06a A572/A572M GR50-07  
ASTM A709/A709M-09 GR50 (345)  
ASTM A709/A709M-09 GR50S (345S)  
ASTM A6/A6M-09

S  
O  
L  
D  
T  
O  
  
FORTACERO S.A. DE CV  
BLVD CARLOS SALINAS DE GORTARI  
KM 8.8  
APODACA, N.L. MEXICO 66600

ITEM #	ITEM DESCRIPTION	QTY	HEAT #	MECHANICAL PROPERTIES							CHEMICAL PROPERTIES											
				YIELD TO TENSILE RATIO	YIELD STRENGTH	TENSILE STRENGTH	ELONG	CHARPY IMPACT		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	V	Cb	CE	
					PSI	MPa		PSI	MPa													TEMP °F
1	W08 - 35.0	47	369793	.76	52000	68000	25			.07	.90	.015	.027	.23	.29	.09	.09	.03	.00	.015	.27	
	40'			.76	51000	67000	25															
	W200 x 52.0				359	469	25															
	12.192 M				352	462	25															
2	W08 - 35.0	21	369795	.77	53000	69000	26			.08	.90	.013	.025	.26	.29	.10	.08	.04	.00	.017	.28	
	40'			.75	52000	69000	25															
	W200 x 52.0				365	476	26															
	12.192 M				359	476	25															
3	W08 - 35.0	1	371072	.77	53000	69000	26			.07	.90	.013	.031	.23	.31	.11	.09	.03	.00	.013	.27	
	40'			.76	51000	67000	27															
	W200 x 52.0				365	476	26															
	12.192 M				352	462	27															
4	W08 - 35.0	8	371074	.76	51000	67000	26			.07	.90	.014	.029	.24	.31	.10	.10	.03	.00	.013	.28	
	40'			.78	52000	67000	26															
	W200 x 52.0				352	462	26															
	12.192 M				359	462	26															
5	W08 - 35.0	6	371077	.76	52000	68000	26			.07	.90	.014	.027	.25	.32	.11	.10	.03	.00	.014	.28	
	40'			.76	52000	68000	26															
	W200 x 52.0				359	469	26															
	12.192 M				359	469	26															
6	W08 - 35.0	1	372755	.79	56000	71000	26			.08	.93	.015	.032	.25	.30	.12	.10	.04	.00	.016	.30	
	40'			.80	55000	69000	25															
	W200 x 52.0				386	490	26															
	12.192 M				379	476	25															
7	W08 - 35.0	25	372756	.80	56000	70000	25			.07	.92	.020	.034	.21	.32	.11	.10	.09	.00	.017	...	
	40'			.80	55000	69000	26															
	W200 x 52.0				386	483	25															
	12.192 M				379	476	26															
8	W08 - 35.0	29	372757	.77	54000	70000	24			.07	1.02	.023	.035	.21	.28	.11	.14	.03	.00	.014	...	
	40'			.77	54000	70000	26															
	W200 x 52.0				372	483	24															
	12.192 M				372	483	26															
9	W08 - 40.0	1	372791	.78	56000	72000	25			.08	1.10	.013	.021	.30	.31	.11	.09	.03	.00	.014	.31	
	40'			.79	57000	72000	26															
	W200 x 59.0				386	496	25															
	12.192 M				393	496	26															

W=C+Si+Mn+Cu+Ni+Cr+Mo+V+... CARBON EQUIVALENT: CE = C(Mn)W = C + Mn/6 + (Cr+Mn+V)/5 + (Ni+Cu)/15  
 Correction factor: C=0.0011(Cu)+0.0017(Mn)+0.0001(Cr)-1.4E-05(Ni)+0.00017(Mo)+0.00012(V)+0.0001(Cu)<sup>2</sup>  
 Mercury has not been used in the direct manufacturing of this material.

ELONGATION BASED ON 8.00 INCH GAUGE LENGTH

I hereby certify that the contents of this report are accurate and correct. All test results and operations performed by this material manufacturer are in compliance with the requirements of the material specifications listed in the Specifications Block above.

*Gay Lennell*

QUALITY ASSURANCE  
CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI  
SWORN TO AND SUBSCRIBED BEFORE ME THIS

29 Day of 09/11

Charlene Wallis NOTARY PUBLIC  
MY COMMISSION EXPIRES 10/21/2011

