CERTIFIED MILL TEST REPORT

DATE	8/09/11
INVOICE NO.	427215
BILL OF LADING	34025
CUSTOMER NO.	0829
CUSTOMER P.O.	4500079943

NUCOR-YAMATO STEEL CO.

P.O. BOX 1228 ● BLYTHEVILLE,AR 72316

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.

SHIP TO
FORTACERO C/O PAGE & JONES
251-432-1646
52 N JACKSON ST FIN DEST VERACRUZ
MOBILE, AL 36602

SPECIFICATIONS
ASTM A992/A992M-06a A572/A572M GR50-07
ASTM A709/A709M-09 GR50 (345)
ASTM A709/A709M-09 GR50S (345S)
ASTM A6/A6M-09

SOLD TO
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: YIELD TO TENSILE RATIO	YIELD STRENGTH PSI / MPa	TENSILE STRENGTH PSI / MPa	ELONG % / %	CHARPY IMPACT TEMP °F / °C	IMPACT ENERGY FT-LBS / JOULES	CHEMICAL PROPERTIES: C	Mn	P	S	Si	Cu	Ni	Cr	Mo / Sn	V / Pcm	Cb	CE / CI
1	W08 - 31.0	10	369783	.79	56000	71000	28			.08	.94	.017	.025	.25	.30	.09	.09	.02	.00	.015	.29
	40'			.79	55000	70000	26											.01	.16		
	W200 x 46.1				386	490	28														
	12.192 M				379	483	26														
2	W08 - 31.0	42	369785	.77	55000	71000	25			.08	.90	.014	.029	.27	.29	.09	.08	.02	.00	.016	.28
	40'			.79	55000	70000	26											.01	.16		
	W200 x 46.1				379	490	25														
	12.192 M				379	483	26														
3	W08 - 31.0	8	369787	.79	56000	71000	25			.08	.92	.015	.028	.24	.26	.08	.09	.02	.00	.015	.27
	40'			.77	55000	71000	26											.01	.16		
	W200 x 46.1				386	490	25														
	12.192 M				379	490	26														
4	W14 - 22.0	42	364743	.85	60000	71000	23			.07	.71	.020	.032	.27	.30	.11	.11	.03	.00	.007	.25
	40'			.84	57000	68000	24											.01	.14		
	W360 x 32.9				414	490	23														
	12.192 M				393	469	24														
5	W14 - 22.0	21	364744	.82	56000	68000	24			.08	.72	.018	.029	.25	.28	.12	.12	.03	.00	.007	.26
	40'			.80	55000	69000	23											.01	.15		
	W360 x 32.9				386	469	24														
	12.192 M				379	476	23														
6	W18 - 71.0	2	370468	.75	53000	71000	27			.08	1.01	.023	.034	.26	.37	.11	.14	.03	.00	.016	.31
	40'			.74	52000	70000	28											.01	.17		
	W460 x106.0				365	490	27														
	12.192 M				359	483	28														
7	W18 - 71.0	1	370471	.75	53000	71000	28			.08	1.00	.013	.029	.25	.30	.14	.08	.04	.00	.016	.30
	40'			.74	52000	70000	28											.01	.17		
	W460 x106.0				365	490	28														
	12.192 M				359	483	28														
8	W18 - 71.0	3	370475	.77	54000	70000	27			.08	1.10	.013	.032	.26	.31	.13	.08	.03	.00	.015	.31
	40'			.77	55000	71000	28											.01	.17		
	W460 x106.0				372	483	27														
	12.192 M				379	490	28														
9	W18 - 71.0	2	370584	.73	56000	77000	26			.17	.80	.012	.027	.19	.29	.11	.09	.03	.00	.016	.35
	40'			.73	56000	77000	26											.01	.24		
	W460 x106.0				386	531	26														
	12.192 M				386	531	26														

CARBON EQUIVALENT: CE = CE(IIW) = C + Mn/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15
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.

Guy Lemell
QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS 9 Day of 08/11

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2015

CHARLENE WALLIS NOTARY PUBLIC MISSISSIPPI CO. ARKANSAS MY Comm. Exp. 10-21-2015