LF000103

CERTIFIED MILL TEST REPORT

DATE	7/25/11
INVOICE NO.	424184
BILL OF LADING	32384
CUSTOMER NO.	0829
CUSTOMER P.O.	4500079731

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 GULF STREAM MARINE
PORT OF BROWNSVILLE

BROWNSVILLE, TX

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 - 35.0	45	364000	.79	55000	70000	24					.07	1.01	.011	.032	.22	.31	.13	.09	.04	.00	.015	.30
	40'			.78	53000	68000	24													.01	.16		
	W200 x 52.0				379	483	24																
	12.192 M				365	469	24																
2	W08 - 35.0	14	364002	.78	58000	74000	24					.08	1.11	.017	.031	.28	.31	.13	.13	.04	.01	.017	.34
	40'			.79	58000	73000	25													.01	.17		
	W200 x 52.0				400	510	24																
	12.192 M				400	503	25																
3	W08 - 35.0	6	364058	.78	57000	73000	24					.07	1.10	.017	.034	.27	.30	.13	.09	.03	.00	.020	.30
	40'			.78	56000	72000	24													.01	.16		
	W200 x 52.0				393	503	24																
	12.192 M				386	496	24																
4	W08 - 35.0	2	364060	.80	60000	75000	23					.08	1.10	.015	.034	.29	.31	.13	.09	.03	.00	.022	.31
	40'			.80	59000	74000	24													.01	.17		
	W200 x 52.0				414	517	23																
	12.192 M				407	510	24																
5	W08 - 35.0	3	364064	.82	60000	73000	24					.08	1.10	.016	.033	.26	.28	.13	.12	.04	.00	.016	.32
	40'			.80	59000	74000	24													.01	.17		
	W200 x 52.0				414	503	24																
	12.192 M				407	510	24																
6	W08 - 35.0	25	369795	.77	53000	69000	26					.08	.90	.013	.025	.26	.29	.10	.08	.04	.00	.017	.23
	40'			.75	52000	69000	25													.01	.16		
	W200 x 52.0				365	476	26																
	12.192 M				359	476	25																
7	W08 - 40.0	1	366903	.76	52000	68000	26					.07	1.18	.020	.035	.22	.27	.11	.12	.03	.00	.017	
	40'			.76	51000	67000	24													.01	.16		
	W200 x 59.0				359	469	26																
	12.192 M				352	462	24																
8	W08 - 40.0	4	366905	.76	52000	68000	25					.08	1.10	.019	.031	.21	.27	.10	.09	.03	.00	.015	
	40'			.75	51000	68000	24													.01	.17		
	W200 x 59.0				359	469	25																
	12.192 M				352	469	24																
9	W08 - 40.0	1	369818	.77	54000	70000	26					.07	1.10	.014	.029	.29	.27	.11	.11	.03	.00	.015	.31
	40'			.77	53000	69000	26													.01	.16		
	W200 x 59.0				372	483	26																
	12.192 M				365	476	26																

Pcm = C + Mn/30 + Cu/20 + Ni/60 + Cr/20 + Mo/15 + V/10 + 5B (Applies to 0.0005 - 0.0030 B)

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.

Corrosion Index: CI=26.01(%Cu)+3.88(%Ni)+1.20(%Cr)-1.48(%Si)+17.28(%P)-7.29(%Cu)(%Ni)-9.10(%Ni)(%P)-33.39(%Cu)^2

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.

Gary Lonnell

QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS 25 Day of 07/11

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2013

CHARLENE WALLIS MY Comm. Exp. NOTARY PUBLIC 10-21-2013 MISSISSIPPI CO. ARKANSAS