DATE	11/08/11
INVOICE NO.	443706
BILL OF LADING	43661
CUSTOMER NO.	0829
CUSTOMER P.O.	4500082382

NUCOR-YAMATO STEEL CO.

P.O. BOX 1238 • BLYTHEVILLE,AR 72316

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.

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 66700

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	7	372742	.80	56000	70000	25			.07	.92	.020	.034	.22	.30	.11	.12	.04	.00	.015	.28
	40'			.81	50000	72000	25											.01	.15		
	W200 x 46.1				386	483	25														
	12.192 M				400	496	25														
2	W08 - 31.0	5	372745	.81	58000	72000	26			.07	.90	.017	.030	.23	.30	.12	.10	.04	.00	.015	.28
	40'			.82	58000	71000	26											.01	.15		
	W200 x 46.1				400	496	26														
	12.192 M				400	490	26														
3	W08 - 31.0	5	372747	.78	54000	69000	25			.08	.92	.013	.029	.23	.36	.12	.09	.04	.00	.016	.29
	40'			.79	55000	70000	25											.01	.16		
	W200 x 46.1				372	476	25														
	12.192 M				379	483	25														
4	W08 - 31.0	2	372749	.77	54000	70000	25			.07	.91	.018	.034	.26	.31	.11	.09	.04	.01	.016	.28
	40'			.76	52000	68000	25											.01	.15		
	W200 x 46.1				372	483	25														
	12.192 M				359	469	25														
5	W08 - 31.0	14	372750	.81	56000	69000	26			.07	.91	.022	.035	.24	.30	.12	.11	.04	.00	.015	.28
	40'			.80	55000	69000	24											.01	.15		
	W200 x 46.1				386	476	26														
	1...192 M				379	476	24														
6	W08 - 31.0	2	372751	.80	56000	70000	27			.07	.92	.020	.035	.24	.31	.11	.12	.04	.00	.015	.28
	40'			.80	56000	70000	26											.01	.15		
	W200 x 46.1				386	483	27														
	12.192 M				386	483	26														
7	W10 - 26.0	14	368418	.80	57000	71000	24			.07	.91	.016	.032	.26	.34	.11	.12	.03	.00	.016	.28
	40'			.82	58000	71000	23											.01	.15		
	W250 x 38.5				393	490	24														
	12.192 M				400	490	23														
8	W10 - 26.0	15	368420	.83	59000	71000	26			.07	.92	.017	.035	.22	.36	.11	.13	.03	.00	.016	.28
	40'			.84	59000	70000	24											.01	.15		
	W250 x 38.5				407	490	26														
	12.192 M				407	483	24														
9	W10 - 26.0	8	368422	.87	58000	71000	26			.05	.90	.015	.033	.25	.30	.12	.11	.03	.00	.016	.29
	40'			.82	58000	71000	24											.01	.16		
	W250 x 38.5				400	490	26														
	12.192 M				400	490	24														

CARBON EQUIVALENT: CE = C + Mn/6 + (Cr+Mo+V)/5 + (Cu+Ni)/15 (Ladle analysis)
Skippers lines cut from end of the slab during rolling of this material.

Continuous Casting: CE(IIW) = C + Mn/6 + (Cr+Mo+V)/5 + (Cu+Ni)/15 (Ladle analysis)

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 Lennell
QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS 8 Day of 11/11

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2015

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