DATE	4/17/08
INVOICE NO.	222508
BILL OF LADING	904108
CUSTOMER NO.	8446
CUSTOMER P.O.	98162

NUCOR-YAMATO STEEL CO.

P.O. BOX 1228 ● 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
FERRE T/L C/O LOGISTICA INTEGRAL EN
ESPUELA O ESCAPE #06-717-94
FINAL: SAN LUIS POTOSI, SLP MX
LAREDO, TX

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

38603

SOLD TO
FERRE BARNIEDO, S.A. DE C.V.
AV REVOLUCION #81 COL SAN CRISTOBAL
ECATEPEC DE MORELOS
EDO, MEXICO CP 55000

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
	W24 -104.0	1	315346	.77	56000	73000	27			.08	1.21	.013	.021	.27	.28	.10	.10	.03	.00	.015	--
	40'			.78	56000	72000	28											.01	.17		
	W610 x155.0				386	503	27														
	12.192 M				386	496	28														
2	W24 -104.0	1	315358	.73	55000	75000	25			.08	1.27	.012	.028	.26	.28	.10	.11	.02	.00	.014	.35
	40'			.76	57000	75000	25											.01	.17		
	W610 x155.0				379	517	25														
	12.192 M				393	517	25														
3	W24 -117.0	7	315362	.78	57000	73000	29			.07	1.20	.014	.023	.28	.29	.09	.13	.02	.00	.019	.33
	40'			.77	57000	74000	28											.01	.16		
	W610 x174.0				393	503	29														
	12.192 M				393	510	28														
4	W24 -117.0	11	315364	.77	57000	74000	28			.07	1.20	.015	.024	.28	.26	.09	.12	.03	.00	.019	.32
	40'			.77	57000	74000	25											.01	.16		
	W610 x174.0				393	510	28														
	12.192 M				393	510	25														
5	W24 -117.0	7	315366	.78	56000	72000	27			.08	1.21	.016	.028	.26	.28	.11	.14	.03	.00	.014	.34
	40'			.74	54000	73000	26											.01	.17		
	W610 x174.0				386	496	27														
	12.192 M				372	503	26														
6	W24 -117.0	6	315368	.75	55000	73000	26			.08	1.21	.012	.026	.28	.29	.09	.11	.02	.00	.015	.34
	40'			.75	55000	73000	26											.01	.17		
	W610 x174.0				379	503	26														
	12.192 M				379	503	26														
	24 -117.0	1	315370	.76	56000	74000	26			.07	1.22	.014	.028	.27	.28	.11	.13	.03	.00	.014	.3
	40'			.76	55000	72000	26											.01	.16		
	W610 x174.0				386	510	26														
	12.192 M				379	496	26														
8	W24 -131.0	1	315229	.76	58000	76000	28			.09	1.30	.014	.017	.30	.28	.09	.11	.02	.00	.019	.36
	40'			.74	58000	78000	26											.01	.19		
	W610 x195.0				400	524	28														
	12.192 M				400	538	26														
9	W24 -131.0	2	315232	.76	57000	75000	27			.08	1.30	.014	.019	.29	.28	.09	.08	.03	.00	.018	.34
	40'			.76	57000	75000	26											.01	.17		
	W610 x195.0				393	517	27														
	12.192 M				393	517	26														

$Pcm = C + \frac{Si}{30} + \frac{Mn}{20} + \frac{Cu}{20} + \frac{Ni}{60} + \frac{Cr}{20} + \frac{Mo}{15} + \frac{V}{10} + 5B$ B=Approx..0005

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

Corrosion Index: $CI=26.01(\%Cu)+3.88(\%Ni)+1.20(\%Cr)+1.49(\%Si)+17.28(\%P)-7.29(\%Cu)(\%Ni)-9.10(\%Ni)(\%P)-33.39(\%Cu)^2$

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 Lemmell

QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS 17 Day of 04/08

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2013

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