DATE	9/01/10
INVOICE NO.	365394
BILL OF LADING	996350
CUSTOMER NO.	5446
CUSTOMER P.O.	49623

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
FB C/O JORGE MIGUEL MEDRANO SANCHEZ
HIDALGO 3530 PAT 4100
FINAL: SAN LUIS POTOSI, SLP MX
NUEVO LAREDO, TM 88000

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

42754

SOLD TO
FERRE BARNIEDO, SA DE CV
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
1	W24 -104.0	1	333658	.80	57000	71000	26			.07	1.00	.014	.027	.21	.27	.12	.10	.03	.00	.020	.30
	0'			.84	62000	74000	24											.01	.15		
	W610 x155.0				393	490	26														
	12.192 M				427	510	24														
2	W24 -104.0	7	351929	.78	56000	72000	28			.07	1.00	.016	.023	.23	.34	.13	.13	.03	.00	.022	.30
	40'			.79	57000	72000	28											.01	.16		
	W610 x155.0				386	496	28														
	12.192 M				393	496	28														
3	W24 -104.0	3	351937	.78	58000	74000	26			.07	1.00	.018	.020	.23	.35	.12	.13	.03	.00	.020	.30
	40'			.80	59000	74000	28											.01	.16		
	W610 x155.0				400	510	26														
	12.192 M				407	510	28														
4	W24 -104.0	10	351938	.81	58000	72000	28			.07	1.01	.017	.027	.21	.34	.12	.14	.03	.00	.021	.30
	40'			.79	58000	73000	26											.01	.16		
	W610 x155.0				400	496	28														
	12.192 M				400	503	26														

FERRE BARNIEDO, S.A. DE
ESTE CERTIFICADO ES COPIA
DEL ORIGINAL DE NUESTROS ARCHIVOS
BASADA LA REMISION No.
58-36-10-00 ventas@ferrebarniedo.com

Pcm = C + Si/30 + Mn/20 + Cu/20 + Ni/60 + Cr/20 + Mo/15 + V/10 + 5 B B=Approx 0.005

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)+1.49(%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 Lennell
QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS
1 Day of 09/10
Charlene Wallis NOTARY PUBLIC
MY COMMISSION EXPIRES 10/21/2013

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