

**NUCOR-YAMATO STEEL CO.**

P O BOX 1228  
BLYTHEVILLE AR 72316

DATE  
7/28/06

32056

**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.

**SOLD TO**

FERRE BARNIEDO, S.A. DE C.V.  
AV REVOLUCION NO 81  
SAN CRISTOBAL ECATEPEC  
EDO DE MEXICO 55000

**SHIP TO**

FERRE BARNIEDO C/O TAF FORWARDING  
1207 UNIROYAL DRIVE  
FINAL: SAN LUIS POTOSI, SLP MX  
LAREDO, TX

INVOICE  
62997  
BILL OF LADING  
796868

CUSTOMER NO.  
5446  
CUSTOMER P.O.  
FERRE 5/9/06

2	<b>SPECIFICATIONS GRADE:</b> ASTM A709/A709M-03a GR50S (345S)	ASTM A992/A992M-04a A572/A572M GR50-04 ASTM A6/A6M-05a	ASTM A709/A709M-U3a GR50 (345)
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ITEM	ITEM DESCRIPTION	QTY	HEAT #	MECHANICAL PROPERTIES								CHEMICAL PROPERTIES										
				YIELD TO TENSILE RATIO	YIELD STRENGTH F <sub>Y</sub> MPa	TENSILE STRENGTH F <sub>T</sub> MPa	ELONG % X	CHARPY IMPACT		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	V	Cb	CE	
								TEMP F	IMPACT ENERGY FT-LBS													Sn
1	W14 -176.0 40' P4162621 W360 x262.0 12.192 M	1	277480	.74	54000	73000	24				.071	.32	.022	.020	.23	.35	.12	.14	.03	.00	.019	.35
2	W14 -176.0 40' W360 x262.0 12.192 M	5	277490	.74	55000	74000	24				.081	.31	.022	.016	.27	.30	.11	.10	.04	.00	.018	.36
3	W14 -176.0 40' W360 x262.0 12.192 M	2	277492	.75	53000	71000	26				.061	.32	.026	.021	.21	.31	.10	.15	.03	.00	.019	.35
4	W14 -176.0 40' W360 x262.0 12.192 M	1	277494	.75	53000	73000	23				.071	.34	.021	.019	.21	.35	.10	.16	.03	.00	.019	.36
5	W14 -176.0 40' W360 x262.0 12.192 M	3	279106	.74	55000	74000	28				.081	.30	.018	.024	.23	.37	.16	.16	.04	.00	.017	.38
6	W21 - 57.0 40' P1670121 W530 x 85.0 12.192 M	6	278408	.71	52000	73000	26				.081	.15	.011	.020	.23	.37	.16	.16	.04	.01	.017	.33
7	W21 - 57.0 40' W530 x 85.0 12.192 M	9	278412	.71	52000	73000	26				.071	.14	.016	.033	.31	.33	.14	.11	.04	.01	.015	.32
8	W21 - 57.0 40' W530 x 85.0 12.192 M	19	278433	.70	50000	71000	25				.081	.12	.014	.031	.31	.31	.11	.10	.03	.00	.015	.33

FERRE BARNIEDO, S.A. DE C.V.  
 ESTE CERTIFICADO ES COPIA  
 DEL ORIGINAL DE NUESTROS ARCHIVOS  
 PARA LA REMISION No. \_\_\_\_\_  
 ventas@ferrebarniedo.com.mx

ELONGATION BASED ON 8.00 INCH GAUGE LENGTH  
 Pcm=C+Si/30+Mn/20+Cu/20+Ni/60+Cr/20+Mo/15+V/10+5B Approx .0005  
 Corrosion Index: CI=26.01(%Cu)+3.88(%Ni)+1.2(%Cr)+1.49(%Si)+17.28(%P)-7.29(%Cu)(%Ni)-9.10(%Ni)(%P)-33.39(%Cu)<sup>2</sup>

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, and when designated by the purchaser, meet the applicable specifications.

GARY PENNELL  
QUALITY ASSURANCE

STATE OF ARKANSAS  
COUNTY OF MISSISSIPPI  
SWORN TO AND SUBSCRIBED BEFORE ME THIS \_\_\_\_\_ Day of \_\_\_\_\_

NOTARY PUBLIC