CERTIFIED MILL TEST REPORT

100% MELTED AND MANUFACTURED IN U.S.A.

NUCOR-YAMATO STEEL CO.
P O BOX 1228
BLYTHEVILLE AR 72316

DATE 9/27/04

All shapes produced by Nucor-Yamato Steel are cast and rolled to a fully killed and fine grain practice.

SOLD TO	SHIP TO	INVOICE	CUSTOMER NO.
FORTACERO S.A. DE CV BLVD CARLOS SALINAS DE GORTARI KM 8.8 APODACA, N.L. MEXICO 66600-0000	FORTACERO S.A. DE CV BLVD CARLOS SALINAS DE GORTARI KM 8.8 APODACA, N.L. MEXICO 66600-0000	887885	0829
		BILL OF LADING 696814	CUSTOMER P.O. 4500021098

SPECIFICATIONS GRADE: ASTM A992-02 ASTM A572GR50-01 ASTM A67A6M-02b
ASTM A709/A709M-01b GR50 (345)

ASTM A709/A709M-01b GR50S (345S)

ITEM	ITEM DESCRIPTION	QTY	HEAT #	MECHANICAL PROPERTIES: YIELD TO TENSILE RATIO	YIELD STRENGTH PSI MPa	TENSILE STRENGTH PSI MPa	ELONG % IN	CHARPY IMPACT: TEMP F C	IMPACT ENERGY FT-LBS JOULES	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	V	Cb	CE
																		Sn	Pcm		CI
1	W24 - 55.0 40' W610 x 82.0 12.192 M	1	238339	.81 .79	55000 54000 379 372	68000 68000 469 469	25 26 25 26			.07	1.14	.017	.036	.29	.28	.10	.09	.02 .01	.03 .15	.002	.32
2	W24 - 55.0 40' W610 x 82.0 12.192 M	2	238345	.76 .77	53000 55000 365 379	70000 71000 483 490	27 27 27 27			.05	1.16	.025	.032	.27	.28	.09	.12	.02 .00	.03 .14	.003	.29
3	W24 - 55.0 40' W610 x 82.0 12.192 M	1	238376	.81 .81	56000 56000 386 386	69000 69000 476 476	26 29 26 29			.05	1.14	.022	.028	.35	.31	.10	.07	.02 .01	.04 .14	.003	.30
4	W24 - 55.0 40' W610 x 82.0 12.192 M	5	238378	.80 .80	57000 56000 393 386	71000 70000 490 483	25 24 25 24			.07	1.15	.018	.037	.30	.32	.14	.07	.02 .01	.04 .16	.002	.32
5	W24 - 55.0 40' W610 x 82.0 12.192 M	3	238380	.79 .79	56000 55000 386 379	71000 70000 490 483	25 25 25 25			.05	1.19	.020	.028	.32	.32	.12	.08	.02 .01	.04 .14	.003	.31
6	W24 - 55.0 40' W610 x 82.0 12.192 M	3	238381	.81 .79	59000 56000 407 386	73000 71000 503 490	25 26 25 26			.06	1.17	.024	.027	.25	.36	.12	.09	.03 .01	.05 .15	.004	.32
7	W24 - 55.0 40' W610 x 82.0 12.192 M	3	238382	.82 .82	59000 59000 407 407	72000 72000 496 496	24 22 24 22			.06	1.17	.022	.037	.33	.36	.11	.10	.02 .01	.05 .16	.003	.32

ELONGATION BASED ON 8.00 INCH GAUGE LENGTH

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

Pcm=C+Si / 30+Mn / 20+Cu / 20+Ni / 60+Cr / 20+Mo / 15+V / 10+5B Boron .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)^2

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