NUCOR-YAMATO STEEL CO.

P O BOX 1228
BLYTHEVILLE AR 72316

DATE
11/17/06

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.

1022

SOLD TO	SHIP TO	INVOICE	CUSTOMER NO.
FERRE BARNIEDO, S.A. DE C.V. AV REVOLUCION #81 COL SAN CRISTOBAL ECATEPEC DE MORELOS EDO, MEXICO CP 55000	FERRE C/O LOGISTICA INTEGRAL EN ESPUELA O ESCAPE #06-717-94 FINAL: SAN LUIS POTOSI, SLP MX LAREDO, TX	92707	5446
		BILL OF LADING 816030	CUSTOMER P.O. 63925

2 SPECIFICATIONS GRADE: ASTM A992/A992M-06a A572/A572M GR50-04 ASTM A709/A709M-03a GR50 (345)
ASTM A709/A709M-03a GR50S (345S) ASTM A6/A6M-05a

ITEM	ITEM DESCRIPTION	QTY	HEAT #	MECHANICAL PROPERTIES						CHEMICAL PROPERTIES											
				YIELD TO TENSILE RATIO	YIELD STRENGTH PSI MPa	TENSILE STRENGTH PSI MPa	ELONG % %	CHARPY IMPACT TEMP F C	CHARPY IMPACT ENERGY FT-LBS JOULES	C	Mn	P	S	Si	Cu	Ni	Cr	Mo Sn	V Pcm	Cb	CE CI
	1P0808048SOI																				
1	W08 - 48.0	22	285819	.73	55000	75000	25			.08	1.27	.016	.032	.33	.29	.12	.13	.03	.00	.021	.35
	50'			.74	56000	76000	26											.01	.17		
	W200 x 71.0				379	517	25														
	15.240 M 1P0808058SOI				386	524	26														
2	W08 - 58.0	3	285847	.74	52000	70000	26			.06	1.22	.018	.034	.29	.26	.11	.12	.04	.00	.022	.31
	45'			.75	53000	71000	25											.01	.15		
	W200 x 86.0				359	483	26														
	13.716 M				365	490	25														

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 Boigren .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