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	V	Cb	CE
	IP0808040451																	Sn	Pcm		CI
1	W08 - 40.0	1	285794	.77	56000	73000	24			.06	1.22	.023	.036	.31	.28	.10	.13	.03	.00	.023	.32
	45'			.75	54000	72000	24											.01	.15		
	W200 x 59.0				386	503	24														
	13.716 M				372	496	24														
2	W08 - 40.0	9	285808	.73	53000	73000	25			.07	1.24	.016	.032	.28	.28	.10	.10	.03	.00	.025	.34
	45'			.73	53000	73000	24											.01	.16		
	W200 x 59.0				365	503	25														
	13.716 M IP0808048451				365	503	24														
3	W08 - 48.0	7	285633	.72	57000	79000	23			.09	1.21	.019	.027	.34	.31	.15	.15	.04	.00	.025	.36
	45'			.71	55000	77000	23											.01	.19		
	W200 x 71.0				393	545	23														
	13.716 M				379	531	23														
4	W08 - 48.0	4	285832	.74	52000	70000	25			.06	1.20	.013	.032	.28	.33	.14	.11	.03	.00	.020	.32
	45'			.74	53000	72000	24											.01	.16		
	W200 x 71.0				359	483	25														
	13.716 M				365	496	24														
5	W08 - 48.0	21	285835	.73	57000	78000	23			.07	1.20	.016	.033	.32	.27	.12	.12	.03	.00	.023	.33
	45'			.72	52000	72000	24											.01	.16		
	W200 x 71.0				393	538	23														
	13.716 M IP0808048501				359	496	24														
6	W08 - 48.0	4	273873	.76	56000	74000	26			.06	1.20	.016	.021	.31	.30	.12	.12	.04	.00	.022	.32
	50'			.76	56000	74000	25											.01	.16		
	W200 x 71.0				386	510	26														
	15.240 M				386	510	25														
7	W08 - 48.0	1	273875	.75	56000	75000	25			.06	1.23	.018	.025	.28	.25	.15	.12	.04	.01	.025	.33
	50'			.75	56000	75000	26											.01	.15		
	W200 x 71.0				386	517	25														
	15.240 M				386	517	26														
8	W08 - 48.0	1	273879	.74	57000	77000	24			.06	1.20	.019	.031	.30	.33	.12	.14	.04	.01	.023	.35
	50'			.76	59000	78000	24											.01	.18		
	W200 x 71.0				393	538	24														
	15.240 M				393	538	24														

ESTE CERTIFICADO ES COPIA FIEL DEL ORIGINAL DE NUESTROS ARCHIVOS
LA REMISION No 71430

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 b-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)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