NUCOR-YAMATO STEEL CO.

P O BOX 1228
BLYTHEVILLE AR 72316

DATE
5/01/04

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
MANUFACTURES METALICAS AJAX
C/O GULFSIDE WAREHOUSE
400 S. PORT RD PORT OF BROWNSVILLE
BROWNSVILLE TX 78520-0000

SHIP TO
MANUFACTURAS METALICAS AJAX S.A.
C/O VILLASANA & CO INC
4703 WAREHOUSE LANE IND PARK
LAREDO, TX 78040

INVOICE	CUSTOMER NO.
857458	7262

BILL OF LADING	CUSTOMER P.O.
675764	YAMATO 90

SPECIFICATIONS GRADE: ASTM A992-02 ASTM A572GR50-01 ASTM A6/A6M-02b
ASTM A709/A709M-01b GR50 (345)

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

25742

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	V	Cb	CE
																		Sn	Pcm		CI
1	W18 - 97.0	1	234354	.77	58000	75000	28			.09	1.30	.021	.020	.27	.35	.09	.13	.02	.04	.001	.38
	40'			.78	59000	76000	26											.01	.20		
	W460 x144.0				400	517	28														
	12.192 M				407	524	26														
2	W24 - 94.0	2	232052	.79	55000	70000	27			.06	1.31	.014	.020	.23	.28	.10	.12	.02	.04	.002	.35
	40'			.76	54000	71000	27											.01	.16		
	W610 x140.0				379	483	27														
	12.192 M				372	490	27														
3	W24 - 94.0	1	233373	.77	57000	74000	23			.07	1.30	.014	.020	.27	.31	.10	.09	.02	.04	.002	.35
	40'			.77	56000	73000	22											.01	.17		
	W610 x140.0				393	510	23														
	12.192 M				386	503	22														

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-bigger .001

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