DATE	10/18/11
INVOICE NO.	439034
BILL OF LADING	40979
CUSTOMER NO.	0829
CUSTOMER P.O.	4500081820

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

100% MELTED AND MANUFACTURED IN [illegible]
All shapes produced by Nucor-Yamato Steel and [illegible] and rolled to a fully killed and fine grain practice.

SHIP TO
FORTACERO C/O GULF PORT MARINE
PORT OF BROWNSVILLE

BROWNSVILLE, TX

SPECIFICATIONS
ASTM A992/A992M-06a A572/A572M [illegible]
ASTM A709/A709M-09 GR50 (345)
ASTM A709/A709M-09 GR50S (345S)
ASTM A6/A6M-09

SOLD TO
FORTACERO S.A. DE CV
BLVD CARLOS SALINAS DE GORTARI
KM 8.8
APODACA, N.L. MEXICO 66600

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
																		Sn	Pcm		CI
1	W14 - 22.0	17	372846	.82	58000	71000	23			.08	.71	.016	.028	.19	.31	.12	.12	.03	.06	.00[illegible]	
	40'			.83	60000	72000	22											.01	.19		
	W360 x 32.9				400	490	23														
	12.192 M				414	496	22														
2	W14 - 26.0	67	372847	.76	51000	67000	26			.08	.70	.012	.026	.21	.32	.11	.09	.03	.00[illegible]	[illegible]	
	40'			.76	50000	66000	27											.01	.15		
	W360 x 39.0				352	462	26														
	12.192 M				345	455	27														
3	W14 - 26.0	33	372848	.79	54000	68000	24			.08	.70	.013	.027	.19	.31	.12	.09	.03	.00		
	40'			.79	53000	67000	26											.01	.15		
	W360 x 39.0				372	469	24														
	12.192 M				365	462	26														
4	W14 - 26.0	17	372850	.78	52000	67000	26			.07	.71	.016	.030	.16	.33	.11	.11	.03	.00	.00[illegible]	
	40'			.79	53000	67000	26											.01	.14		
	W360 x 39.0				359	462	26														
	12.192 M				365	462	26														
5	W14 - 26.0	3	372852	.79	54000	68000	26			.08	.70	.011	.024	.21	.32	.11	.09	.03	.00	.00[illegible]	
	40'			.78	53000	68000	26											.01	.15		
	W360 x 39.0				372	469	26														
	12.192 M				365	469	26														
6	W14 - 26.0	4	372853	.77	51000	66000	26			.07	.70	.012	.025	.23	.28	.12	.10	.03	.00	.007	.25
	40'			.79	52000	66000	27											.01	.14		
	W360 x 39.0				352	455	26														
	12.192 M				359	455	27														
7	W14 - 26.0	23	372856	.78	52000	67000	25			.07	.70	.011	.022	.20	.32	.11	.09	.03	.00	.00[illegible]	
	40'			.79	53000	67000	24											.01	.14		
	W360 x 39.0				359	462	25														
	12.192 M				365	462	24														
8	W16 - 26.0	14	371214	.80	52000	65000	27			.08	.76	.022	.031	.16	.39	.12	.12	.03	.00[illegible]		
	40'			.84	57000	68000	24											.01	.[illegible]		
	W410 x 38.8				359	448	27														
	12.192 M				393	469	24														
9	W16 - 26.0	42	371215	.79	53000	67000	25			.08	.75	.019	.032	.17	.31	.10	.11	.03	.[illegible]		
	40'			.82	55000	67000	24											.01	.[illegible]		
	W410 x 38.8				365	462	25														
	12.192 M				379	462	24														

Pcm = C + Si/30 + Mn/20 + Cu/20 + Ni/60 + Cr/20 + Mo/15 + V/10 + 5B [illegible]

CARBON EQUIVALENT: CE = CE(IIW) = C + Mn/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15
Mercury has not been used in the direct manufacturing of this material.

Corrosion Index: CI=26.01(%Cu)+3.88(%Ni)+1.20(%Cr)+1.49(%Si)+17.28(%P)-7.29(%Cu)(%Ni)-9.10(%P)(%Ni)-33.39(%Cu)

ELONGATION BASED ON 8.00 INCH GAUGE LENGTH

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 listed in the Specifications Block above.

Doug Lemell
QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS
18 Day of 10/11

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2013

CHARLENE WALLIS NOTARY PUBLIC 10-21-2013 MISSISSIPPI CO. ARKANSAS