DATE	6/26/12
INVOICE NO.	490326
BILL OF LADING	71609
CUSTOMER NO.	0829
CUSTOMER P.O.	4500088031

NUCOR-YAMATO STEEL CO.

P.O. BOX 1228 ● BLYTHEVILLE,AR 72316

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.

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

BROWNSVILLE, TX

SPECIFICATIONS
ASTM A992/A992M-11 A572/A572M GR50-07
ASTM A709/A709M-11 GR50 (345)
ASTM A709/A709M-11 GR50S (345S)
ASTM A6/A6M-11

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: 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 / Sn	V / Pcm	Cb	CE / Cl
1	W24 - 55.0	3	383927	.76	53000	70000	26			.08	.90	.019	.030	.27	.30	.11	.13	.04	.00	.016	.29
	40'			.75	53000	71000	25											.01	.16		
	W610 x 82.0				365	483	26														
	12.192 M				365	490	25														
2	W24 - 55.0	3	383929	.77	53000	69000	25			.07	.90	.022	.029	.29	.30	.11	.14	.03	.00	.015	.28
	40'			.76	53000	70000	27											.01	.15		
	W610 x 82.0				365	476	25														
	12.192 M				365	483	27														
3	W24 - 55.0	20	387123	.75	52000	69000	26			.07	.94	.021	.028	.21	.29	.11	.11	.03	.00	.015	.29
	40'			.75	51000	68000	27											.01	.15		
	W610 x 82.0				359	476	26														
	12.192 M				352	469	27														
4	W24 - 55.0	7	387127	.76	54000	71000	26			.07	.94	.020	.030	.21	.27	.12	.17	.04	.00	.015	.30
	40'			.75	54000	72000	24											.01	.15		
	W610 x 82.0				372	490	26														
	12.192 M				372	496	24														
5	W24 - 55.0	3	387129	.73	52000	71000	24			.08	.90	.019	.025	.22	.30	.11	.13	.03	.00	.015	.29
	40'			.75	51000	68000	26											.01	.16		
	W610 x 82.0				359	490	24														
	12.192 M				352	469	26														
6	W24 - 55.0	12	387134	.75	52000	69000	24			.07	.93	.018	.030	.22	.28	.11	.09	.03	.00	.015	.28
	40'			.78	52000	67000	28											.01	.15		
	W610 x 82.0				359	476	24														
	12.192 M				359	462	28														
7	W24 - 55.0	3	387138	.77	54000	70000	26			.08	.90	.019	.025	.21	.28	.11	.12	.03	.00	.015	.29
	40'			.75	51000	68000	26											.01	.16		
	W610 x 82.0				372	483	26														
	12.192 M				352	469	26														
8	W24 - 55.0	1	387140	.77	53000	69000	28			.07	.93	.017	.030	.21	.27	.11	.09	.03	.00	.015	.28
	40'			.78	54000	69000	25											.01	.15		
	W610 x 82.0				365	476	28														
	12.192 M				372	476	25														
9	W24 - 55.0	37	387141	.77	54000	70000	27			.07	.93	.022	.025	.24	.27	.11	.13	.03	.00	.016	.29
	40'			.77	55000	71000	27											.01	.15		
	W610 x 82.0				372	483	27														
	12.192 M				379	490	27														

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

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(%Ni)(%P)-33.39(%Cu)^2

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.

Gary Lemell

QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS
20 Day of 06/12

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2015

CHARLENE WALLIS NOTARY PUBLIC MISSISSIPPI CO. ARKANSAS

DATE	5/22/12
INVOICE NO.	484185
BILL OF LADING	67966
CUSTOMER NO.	0829
CUSTOMER P.O.	4500088031

NUCOR-YAMATO STEEL CO.

P.O. BOX 1228 • BLYTHEVILLE,AR 72316

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.

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

BROWNSVILLE, TX

SPECIFICATIONS
ASTM A992/A992M-11 A572/A572M GR50-07
ASTM A709/A709M-11 GR50 (345)
ASTM A709/A709M-11 GR50S (345S)
ASTM A6/A6M 11

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: 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 / Sn	V / Pcm	Cb	CE / Cl
1	W14 - 43.0	42	384530	.77	55000	71000	26			.07	1.00	.018	.028	.27	.33	.11	.10	.03	.00	.015	.30
	40'			.76	54000	71000	27											.01	.16		
	W360 x 64.0				379	490	26														
	12.192 M				372	490	27														
2	W14 - 43.0	10	384532	.75	53000	71000	25			.07	1.00	.016	.030	.23	.31	.12	.11	.03	.00	.015	.30
	40'			.75	53000	71000	25											.01	.16		
	W360 x 64.0				365	490	25														
	12.192 M				365	490	25														
3	W14 - 43.0	4	384534	.77	55000	71000	26			.07	1.00	.015	.029	.25	.28	.11	.11	.03	.00	.015	.30
	40'			.75	53000	71000	27											.01	.15		
	W360 x 64.0				379	490	26														
	12.192 M				365	490	27														
4	W14 - 43.0	6	384546	.77	55000	71000	26			.08	1.05	.013	.027	.26	.26	.11	.12	.04	.00	.016	.31
	40'			.75	54000	72000	26											.01	.17		
	W360 x 64.0				379	490	26														
	12.192 M				372	496	26														
5	W14 - 43.0	5	384548	.76	55000	72000	28			.08	1.00	.011	.030	.26	.25	.10	.11	.04	.00	.016	.30
	40'			.75	54000	72000	26											.01	.16		
	W360 x 64.0				379	496	28														
	12.192 M				372	496	26														
6	W14 - 43.0	5	384551	.75	53000	71000	26			.08	1.00	.012	.024	.23	.25	.10	.11	.03	.00	.015	.30
	40'			.76	53000	70000	26											.01	.16		
	W360 x 64.0				365	490	26														
	12.192 M				365	483	26														
7	W24 - 68.0	3	386334	.77	51000	66000	26			.07	.92	.016	.028	.25	.25	.10	.11	.03	.01	.016	.27
	40'			.77	51000	66000	26											.01	.15		
	W610 x101.0				352	455	26														
	12.192 M				352	455	26														
8	W24 - 68.0	45	386335	.78	52000	67000	25			.07	.96	.015	.021	.23	.26	.09	.11	.03	.01	.016	.28
	40'			.76	51000	67000	25											.01	.15		
	W610 x101.0				359	462	25														
	12.192 M				352	462	25														
9	W24 - 68.0	38	386338	.77	51000	66000	27			.08	.92	.017	.027	.28	.26	.11	.11	.03	.01	.016	.28
	40'			.76	50000	66000	27											.01	.16		
	W610 x101.0				352	455	27														
	12.192 M				345	455	27														

Pcm = C + Si/30 + Mn/20 + Cu/20 + Ni/60 + Cr/20 + Mo/15 + V/10 + 5 B Aim/approx 1.0005

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(%Ni)(%P)-33.39(%Cu)^2

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.

QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS 22 Day of 05/12

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2012

CHARLENE WALLIS MISSISSIPPI CO. ARKANSAS