DATE	7/15/11
INVOICE NO.	422204
BILL OF LADING	31155
CUSTOMER NO.	4829
CUSTOMER P.O.	4500079346

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
ACEROS DE GRADO C/O GULF STRM MAR
PORT OF BROWNSVILLE

BROWNSVILLE, TX

SOLD TO
ACEROS DE GRADO, SA DE CV
AV FELIX U GOMEZ 2828 NTE COL MODER
RFC AGR0811247V9
MONTERREY, NL CP 64530

SPECIFICATIONS
ASTM A992/A992M-06a A572/A572M GR50-07
ASTM A709/A709M-09 GR50 (345)
ASTM A709/A709M-09 GR50S (345S)
ASTM A6/A6M-09

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	CHARPY IMPACT ENERGY FT-LBS / JOULES	CHEMICAL PROPERTIES: C	Mn	P	S	Si	Cu	Ni	Cr	Mo	V	Cb	CE
																		Sn	Pcm		Ceq
1	W16 - 57.0 40' W410 x 85.0 12.192 M	11	369184	.75 .73	52000 52000 359 359	69000 69000 476 476	27 28 27 28			.07	1.02	.013	.026	.23	.28	.11	.11	.03 .01	.00 .15	.015	.30
2	W16 - 67.0 40' W410 x100.0 12.192'M	4	369104	.77 .77	56000 55000 386 379	73000 71000 503 490	29 26 29 26			.08	1.10	.018	.022	.29	.30	.11	.11	.04 .01	.00 .17	.019	.32
3	W16 - 67.0 40' W410 x100.0 12.192 M	3	369109	.76 .76	55000 54000 379 372	72000 71000 496 490	26 26 26 26			.08	1.10	.011	.022	.28	.30	.10	.09	.03 .01	.00 .17	.018	.31
4	W16 - 67.0 40' W410 x100.0 12.192 M	5	369110	.77 .77	54000 54000 372 372	70000 70000 483 483	26 26 26 26			.07	1.12	.015	.025	.32	.30	.10	.07	.03 .01	.00 .16	.019	.31
5	W16 - 67.0 40' W410 x100.0 12.192 M	11	369114	.77 .76	54000 53000 372 365	70000 70000 483 483	26 26 26 26			.08	1.10	.016	.022	.30	.29	.10	.10	.03 .01	.00 .17	.018	.32
6	W16 - 67.0 40' W410 x100.0 12.192 M	1	369121	.77 .77	54000 54000 372 372	70000 70000 483 483	28 26 26 26			.07	1.11	.016	.024	.28	.29	.11	.10	.03 .01	.00 .16	.019	.32
7	W16 - 77.0 40' W410 x114.0 12.192 M	15	369106	.76 .76	53000 53000 365 365	70000 70000 483 483	26 25 26 25			.08	1.10	.019	.026	.33	.31	.10	.11	.04 .01	.00 .17	.019	.11
8	W16 - 77.0 40' W410 x114.0 12.192 M	6	369107	.77 .76	54000 53000 372 365	70000 70000 483 483	26 27 26 27			.08	1.11	.013	.017	.29	.29	.10	.11	.03 .01	.00 .17	.019	
9	W18 - 60.0 40' W460 x 89.0 12.192 M	18	369192	.80 .80	55000 55000 379 379	69000 69000 476 476	26 27 26 27			.07	1.00	.016	.027	.24	.29	.11	.12	.03 .01	.00 .16	.016	.30

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

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

Carbon Equiv: CE=[C+(Mn/6)+(Cr+Mo+V)/5+(Ni+Cu)/15]*100

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 Lamell
QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS
15 Day of 07/11

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2013

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