DATE	6/26/12
INVOICE NO.	491841
BILL OF LADING	72592
CUSTOMER NO.	7142
CUSTOMER P.O.	4500090599

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 PAGE & JONES
251-432-1646 ROLL 11 TO CGT
52 N JACKSON ST FIN DEST VERACRUZ
MOBILE, AL 36602

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 6.8
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	W16 - 45.0	2	387715	.76	56000	74000	25			.07	1.10	.016	.030	.28	.25	.10	.09	.03	.00	.018	.29
	40'			.75	55000	73000	25											.01	.16		
	W410 x 67.0				386	510	25														
	12.192 M				379	503	25														
2	W16 - 45.0	1	387718	.75	55000	73000	24			.08	1.10	.019	.026	.31	.26	.11	.10	.04	.00	.015	.31
	40'			.76	56000	74000	25											.01	.17		
	W410 x 67.0				379	503	24														
	12.192 M				386	510	25														
3	W16 - 45.0	2	387916	.76	55000	72000	23			.08	1.01	.018	.028	.23	.28	.11	.11	.04	.00	.015	.31
	40'			.76	55000	72000	26											.01	.17		
	W410 x 67.0				379	496	23														
	12.192 M				379	496	26														
4	W16 - 45.0	5	386201	.78	57000	73000	25			.07	1.10	.015	.028	.29	.28	.12	.07	.03	.00	.016	.30
	40'			.77	56000	73000	27											.01	.16		
	W410 x 67.0				393	503	25														
	12.192 M				386	503	27														
5	W21 - 44.0	1	367440	.79	58000	73000	24			.07	1.11	.020	.025	.25	.29	.10	.10	.02	.00	.016	.31
	40'			.82	60000	73000	25											.01	.16		
	W530 x 66.0				400	503	24														
	12.192 M				414	503	25														
6	W21 - 44.0	7	367441	.77	56000	73000	24			.08	1.12	.018	.032	.27	.30	.10	.08	.02	.00	.016	.32
	40'			.76	55000	72000	24											.01	.17		
	W530 x 66.0				386	503	24														
	12.192 M				379	496	24														
7	W21 - 44.0	25	367443	.78	59000	76000	25			.08	1.10	.017	.026	.25	.30	.10	.10	.03	.00	.016	.32
	40'			.76	57000	75000	23											.01	.17		
	W530 x 66.0				407	524	25														
	12.192 M				393	517	23														
8	W21 - 44.0	6	370287	.76	56000	74000	24			.08	1.13	.014	.029	.29	.32	.11	.07	.03	.00	.016	.32
	40'			.75	55000	73000	24											.01	.17		
	W530 x 66.0				386	510	24														
	12.192 M				379	503	24														
9	W21 - 44.0	6	386998	.79	55000	70000	24			.07	.93	.021	.029	.22	.29	.11	.14	.04	.00	.016	.30
	40'			.79	55000	70000	24											.01	.15		
	W530 x 66.0				379	483	24														
	12.192 M				379	483	24														

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.

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 Lennell

QUALITY ASSURANCE

CUSTOMER COPY

STATE OF ARKANSAS COUNTY OF MISSISSIPPI
SWORN TO AND SUBSCRIBED BEFORE ME THIS

26 Day of 06/12

Charlene Wallis NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2018

CHARLENE WALLIS NOTARY PUBLIC MY Comm. Exp. 10-21-2018 MISSISSIPPI CO. ARKANSAS