

DATE	2/07/11
INVOICE NO.	390939
BILL OF LADING	11853
CUSTOMER NO.	5446
CUSTOMER P.O.	59941

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.

S H I P T O
FB C/O JORGE MIGUEL MEDRANO SANCHEZ
HIDALGO 3530 PAT 4100
FINAL: SAN LUIS POTOSI, SLP MX
NUEVO LAREDO, TM 88000

S P E C I F I C A T I O N S
ASTM A992/A992M-06a A572/A572M GR50-07
ASTM A709/A709M-09 GR50 (345)
ASTM A709/A709M-09 GR50S (345S)
ASTM A6/A6M-09

S O L D T O
FERRE BARNIEDO, SA DE CV
AV REVOLUCION #81 COL SAN CRISTOBAL
ECATEPEC DE MORELOS
EDC, MEXICO CP 55000

ESTE ORIGINAL ES COPIA FIEL DE NUESTROS ARCHIVOS
AMPARA LA REMISION DE NUESTROS ARCHIVOS
VENTAS@ferrebarniedo.com.mx
TEL 58-36-10-00

ITEM #	ITEM DESCRIPTION	QTY	HEAT #	MECHANICAL PROPERTIES						CHEMICAL PROPERTIES										
				YIELD TO TENSIL RATIO	YIELD STRENGTH		ELONG %	CHARTY IMPACT		P	S	Si	Cu	Ni	Mo	V	Cb	CE		
					MPa	PSI		TEMP °C	IMPACT ENERGY FT LBS											
1	W40 -149.0 40'	1	36490	.77	53000	70000	28			1.02	.019	.02	.29	.09	.10	.03	.00	.018	.30	
2	W40 -149.0 40'	1	36820	.78	53000	73000	27			1.14	.019	.028	.26	.32	.14	.18	.04	.00	.021	.33
3	W40 -149.0 40'	2	360822	.78	59000	74000	28			1.10	.016	.024	.24	.30	.12	.15	.03	.00	.019	.32
4	W40 -149.0 40'	2	360824	.77	59000	75000	28			1.16	.026	.027	.25	.30	.11	.18	.03	.00	.020	.34
5	W40 -149.0 40'	1	360826	.78	58000	74000	29			1.12	.023	.028	.25	.29	.10	.14	.03	.00	.020	.32
6	W40 -149.0 40'	4	360829	.78	59000	76000	26			1.12	.021	.027	.25	.30	.10	.14	.02	.00	.019	.33
7	W40 -149.0 40'	2	360831	.80	59000	74000	28			1.10	.019	.024	.24	.30	.12	.14	.03	.00	.018	.31
8	W40 -149.0 40'	10	360835	.79	57000	72000	26			1.13	.020	.028	.23	.32	.14	.13	.03	.00	.019	.33
9	W40 -149.0 40'	5	360837	.79	57000	72000	27			1.11	.020	.028	.24	.38	.12	.13	.03	.00	.019	.32

FORMULA: $Pcm = C + Si + Mn + Cu + Ni + Cr + Mo + V + 5 B$ (As per ASTM A992/A992M-06a)
CARBON EQUIVALENT: $CE = CE(III) = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15$
Corrosion Index: $CI = 26.01(\%Cu) + 3.88(\%Ni) + 1.20(\%Cr) + 1.49(\%Si) + 17.28(\%P) - 7.23(\%Cu) + (\%Ni) - 9.10(\%Mn) + (\%P) - 33.39(\%Cu)$
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.

Dany Lennell

QUALITY ASSURANCE

CUSTOMER COPY

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

7 Day of 02/11

Charlene Wallis

NOTARY PUBLIC

MY COMMISSION EXPIRES 10/21/2013

