

NUCOR STEEL - BERKELEY
P.O. Box 2259
Mt. Pleasant, S.C. 29464
Phone: (843) 336-6000

CERTIFIED MILL TEST REPORT

12/18/12 16:13:31

100% MELTED AND MANUFACTURED IN THE USA
All beams produced by Nucor-Berkeley are cast and rolled to a fully killed and fine grain practice.
Mercury has not been used in the direct manufacturing of this material.

Sold To: FORTACERO SA DE CV
BLVD CARLOS SALINAS DE KM 8.3
RULE 11 - LAREDO
APODACA, NL 66600

Ship To: NUCOR BERKELEY PORT
HUGER, SC 29450

Customer H.: 1872 - 6
Customer PO: 450094116
B.o.L. H...: 985689
MOS: B

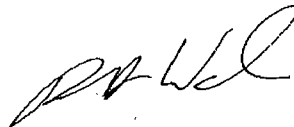
SPECIFICATIONS: Tested in accordance with ASTM specification A6-12/A6M-12 and A370. Quality Manual Rev #26.
AASHTO : M270-50-05
ASME : SA-36 07a
ASTM : A992-11;A36-08/A529-05-50/A572-12-50/A709-345M
CSA : G40.21-50w

Description	Heat# Grade(s) Test/Heat JW	Yield/ Tensile Ratio	Yield Tensile			Elong %	C Cr *****	Mn Mo Ti	P Sn *****	S B *****	Si V N	Cu Nb *****	Ni ***** CI	CE1 CE2 Pcm
			(PSI) (MPa)	(PSI) (MPa)	(PSI) (MPa)									
C10X15.3 040' 00.00" C250X22.8 012.1920m	1214547 A992-11	.84	59500 410	71100 490	24.46	.07 .07	.86 .01	.013 .0100	.024 .0002	.19 .004	.18 .027	.06	.25 .2821 .1333	
			399	486	355	PC(s)	217,260	lbs				InvH:	0	
C10X15.3 040' 00.00" C250X22.8 012.1920m	1214530 A992-11	.84	60200 415	72000 496	24.13	.07 .06	.83 .01	.014 .0111	.029 .0002	.22 .004	.20 .028	.06	.24 .2779 .1302	
			416	496	360	PC(s)	220,320	lbs				InvH:	0	
C10X15.3 040' 00.00" C250X22.8 012.1920m	1214528 A992-11	.85	60700 419	71700 494	23.25	.07 .06	.85 .01	.013 .0103	.029 .0002	.21 .004	.19 .031	.06	.24 .2837 .1345	
			423	494	552	PC(s)	337,824	lbs				InvH:	0	
C10X15.3 040' 00.00" C250X22.8 012.1920m	1214526 A992-11	.83	59600 411	71400 492	23.86	.07 .06	.82 .01	.013 .0097	.030 .0002	.21 .003	.19 .028	.06	.24 .2763 .1309	
			411	495	426	PC(s)	260,712	lbs				InvH:	0	

Elongation based on 8' (20.32cm) gauge length. 'No Weld Repair' was performed. Hg free and no contact with Hg during manufacture.
CI = 26.01Cu+3.88Ni+1.20Cr+1.49Si+17.28P-(7.29Cu*Ni)-(9.10Ni*P)-33.39(Cu*Cu) CE1= C+{(Mn/6)+{(Cr+Mo+V)/5)+{(Ni+Cu)/15}
Pcm = C+{(Si/30)+{(Mn/20)+{(Cu/20)+{(Ni/60)+{(Cr/20)+{(Mo/15)+{(V/10)+5B CE2 = C+{(Mn+Si)/6)+{(Cr+Mo+V+Cb)/5)+{(Ni+Cu)/15}

I hereby certify that the contents of this report are accurate and correct. All test results and operations performed by the material manufacturer are in compliance with material specifications, and when designated by the Purchaser, meet applicable specifications.

Bruce A. Work
Metallurgist



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 RULE 11 - LAREDO
 APODACA, NL 66600

Ship To: NUCOR BERKELEY PORT
 HUGER, SC 29450

Customer #: 1872 - 6
 Customer PO: 450094116
 B.o.L. #: 985689
 MOS: B

SPECIFICATIONS: Tested in accordance with ASIM specification A6-12/A6M-12 and A370. Quality Manual Rev H26.

AASHIO : M270-50-05
 ASME : SA-36 07a
 ASTM : A992-11; A36-08/A529-05-50/A572-12-50/A709-345M
 CSA : G40.21-50w

Description	Heat# Grade(s) Test/Heat JW	Yield/ Tensile Ratio	Yield (PSI) (MPa)	Tensile (PSI) (MPa)	Elong %	C	Mn	P	S	Si	Cu	Ni	CE1
						Cr xxxxxx	Mo Ti	Sn xxxxxx	B xxxxxx	V N	Nb xxxxxx	CI xxxxxx	Pcm
C10X15.3	1214547	.84	59500	71100	24.46	.07	.86	.013	.024	.19	.18	.06	.25
040' 00.00"	A992-11		410	490		.07	.01	.0100	.0002	.004	.027		.2821
C250X22.8		.82	57900	70500	24.94		.001			.0070		4.38	.1333
012.1920m			399	486	355	Pc(s) 217,260 lbs						InvH:	0
C10X15.3	1214530	.84	60200	72000	24.13	.07	.83	.014	.029	.22	.20	.06	.24
040' 00.00"	A992-11		415	496		.06	.01	.0111	.0002	.004	.028		.2779
C250X22.8		.84	60400	72000	26.13		.001			.0075		4.63	.1302
012.1920m			416	496	360	Pc(s) 220,320 lbs						InvH:	0
C10X15.3	1214528	.85	60700	71700	23.25	.07	.85	.013	.029	.21	.19	.06	.24
040' 00.00"	A992-11		419	494		.06	.01	.0103	.0002	.004	.031		.2837
C250X22.8		.86	61400	71600	25.19		.001			.0072		4.54	.1345
012.1920m			423	494	552	Pc(s) 337,824 lbs						InvH:	0
C10X15.3	1214526	.83	59600	71400	23.86	.07	.82	.013	.030	.21	.19	.06	.24
040' 00.00"	A992-11		411	492		.06	.01	.0097	.0002	.003	.028		.2763
C250X22.8		.83	59600	71800	23.10		.001			.0076		4.46	.1309
012.1920m			411	495	426	Pc(s) 260,712 lbs						InvH:	0

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 Pcm = C+(Si/30)+(Mn/20)+(Cu/20)+(Ni/60)+(Cr/20)+(Mo/15)+(V/10)+5B CE2 = C+((Mn+Si)/6)+((Cr+Mo+V+Cb)/5)+((Ni+Cu)/15)

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 B.O.L. F...: 985689
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 ASME : SA-36 07a
 ASIM : A992-11/A36-08/A529-05-50/A572-12-50/F709-345M
 CSA : G40.21-50w

Description	Heat# Grade(s) Test/Heat JW	Yield/ Tensile Ratio	Yield (PSI) (MPa)	Tensile (PSI) (MPa)	Elong %	C Cr *****	Mn Mo Ti	P Sn *****	S B *****	Si V N	Cu Nb *****	Ni ***** CI	CE1	CE2	
													Pcm	Pcm	
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													Inv#:	0	
C10X15.3 040' 00.00" C250X22.8 012.1920m	1214530 A992-11	.84	60200 415	72000 496	24.13	.07 .06	.83 .01	.014 .0111	.029 .0002	.22 .004	.20 .028	.06	.24 .2779	.1302	0
													Inv#:	0	
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													Inv#:	0	
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													Inv#:	0	

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 Pcm = $C + (Si/30) + (Mn/20) + (Cu/20) + (Ni/60) + (Cr/20) + (Mo/15) + (V/10) + 5B$ CE2 = $C + ((Mn+Si)/6) + ((Cr+Mo+V+Cb)/5) + ((Ni+Cu)/15)$

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