

Customer PO	4500541213	Sales Order #	11053534 - 1.1
Product Group	Hot Roll - Merchant Bar Quality	Product #	3017331
Grade	Nucor Multigrade	Lot #	110796601460
Size	0.5" x 8"	Heat #	1107966014
BOL #	BOL-1309859	Load #	1215158
Description	Hot Roll - Merchant Bar Quality Flat 1/2" x 8" Nucor Multigrade 20' 0" [240"] 2001-6000 lbs	Customer Part #	101680020
Production Date	10/13/2022	Qty Shipped LBS	14700
Product Country Of Origin	United States	Qty Shipped EA	54
Original Item Description		Original Item Number	

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed above and that it satisfies those requirements.

Melt Country of Origin : United States

Melting Date: 07/23/2022

C (%)	Mn (%)	P (%)	S (%)	Si (%)	Ni (%)	Cr (%)	Mo (%)	Cu (%)	V (%)	Sn (%)
0.13	0.97	0.012	0.024	0.200	0.12	0.10	0.04	0.30	0.055	0.013

ASTM A529 S78.2 CE (%) : 0.39

**Tensile testing**

	Yield (PSI)	Tensile (PSI)	Elongation in 8" (%)
(1)	57100	73300	21.0
(2)	56800	72500	21.0

**Comments:**

NUCOR MULTIGRADE MEETS THE REQUIREMENTS OF: ASTM A36/A36M-14; A529/529M-05(2009) GR50(345); A572/572M-07 GR50(345); A709/709M-10 GR36(250) & GR50(345); CSA G40.21-04 GR44W(300W)& GR50W(350W); AASHTO M270/M270M-10 GR36(270) & GR50(345); ASME SA36/SA36M-07; MEETS REPORTING REQUIREMENTS OF EN10204 SEC 3.1

1. All manufacturing processes of the steel, including melting, casting & hot rolling, have been performed in U.S.A
2. Mercury not intentionally added at any point during manufacturing or testing of this material.
3. Welding or weld repair was not performed on this material.
4. This material conforms to the specifications described on this document and may not be reproduced, except in full, without written approval of Nucor Corporation.
5. Results reported ASTM E45 (Inclusion content) and ASTM E381 (Macro-etch) are provided as interpretation of ASTM procedures.

Customer PO	4500544290	Sales Order #	11056601 - 3.2
Product Group	Hot Roll - Merchant Bar Quality	Product #	3017331
Grade	Nucor Multigrade	Lot #	110700040960
Size	0.5" x 8"	Heat #	1107000409
BOL #	BOL-1376943	Load #	1283700
Description	Hot Roll - Merchant Bar Quality Flat 1/2" x 8" Nucor Multigrade 20' 0" [240"] 2001-6000 lbs	Customer Part #	101680020
Production Date	03/07/2023	Qty Shipped LBS	14700
Product Country Of Origin	United States	Qty Shipped EA	54
Original Item Description		Original Item Number	

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed above and that it satisfies those requirements.

Melt Country of Origin : United States

Melting Date: 01/19/2023

C (%)	Mn (%)	P (%)	S (%)	Si (%)	Ni (%)	Cr (%)	Mo (%)	Cu (%)	V (%)	Sn (%)
0.13	0.81	0.019	0.010	0.240	0.19	0.16	0.04	0.31	0.052	0.012

ASTM A529 S78.2 CE (%) : 0.39

**Tensile testing**

	Yield (PSI)	Tensile (PSI)	Elongation in 8" (%)
(1)	61300	77400	20.0
(2)	61200	76500	22.0

**Comments:**

NUCOR MULTIGRADE MEETS THE REQUIREMENTS OF: ASTM A36/A36M-14; A529/529M-05(2009) GR50(345); A572/572M-07 GR50(345); A709/709M-10 GR36(250) & GR50(345); CSA G40.21-04 GR44W(300W)& GR50W(350W); AASHTO M270/M270M-10 GR36(270) & GR50(345); ASME SA36/SA36M-07; MEETS REPORTING REQUIREMENTS OF EN10204 SEC 3.1

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Ada Ortega, Quality Assurance