McMASTER-CARR®

Certificate

330-995-5500
330-995-9600 (fax)
cle.sales@mcmaster.com

Purchase Order	Order Date	Placed By	McMaster-Carr Number	Number of Certificates
P1444462	2/16/2022	Jane Beattey	4517938-02	1

Line		Product	Ordered	Status	Certificate
2	6545K41	High-Strength 1045 Carbon Steel Bar, 1-3/4" Thick, 1-3/4" Wide, 3 Feet Long	1 each	1 each delivers February 17	175–4653

Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

MILL CERTIFICATION

NUCOR®
COLD FINISH WISCONSIN

Nucor Cold Finish Wisconsin, Inc
7200 South Sixth St
Oak Creek, WI 53154
USA

Page 1 of 2
MTR No: WI-MTR-024269
MTR Date: 10/1/2021

Sold To: C00161
CASTLE METALS
1420 KENSINGTON RD
STE 220
OAK BROOK, IL 60523
USA

Ship To: C00387
A M CASTLE & CO-JANESVILLE
3800 ENTERPRISE DR
JANESVILLE, WI 53546
USA

Nucor Item No:	101824
Description:	R SQ 1.75" 1045Q2 12' -CD
Customer PO No/ Line No:	576464/1
Customer Part No:	30432
Nucor SO No/ Line No:	WI-SO-018627/1
BOL No:	WI-BOL-005052
Nucor Load No:	3400007005
Heat No:	10010637923
Quantity Shipped:	2,007 LB
Bundles:	1
Furnace batch number	

Product Description
R SQ 1.75" 1045Q2 12' -CD

MTR Notes

Meets the requirements of ASTM A108-18, ASTM A576, JDM A0 QL2, CAT 1E0361

Chemical:

C (%) = 0.49	Mn (%) = 0.78	P (%) = 0.012
S (%) = 0.022	Si (%) = 0.24	Cu (%) = 0.15
Ni (%) = 0.05	Cr (%) = 0.1	Mo (%) = 0.01
Al (%) = 0.026	Ni+Cr+Mo (%) = 0.17	Melt Mill Source = Nucor Steel Nebraska
Country of Rolling = US	Roll Mill Source = Nucor Steel NebraskaCountry of Origin = US	

Cleanliness:

ASTM E45 Method A (Worst)

A T = 2	A H = 0.5	B T = 1.5
B H = 1	C T = 0.5	C H = 0
D T = 1.5	D H = 0.5	

ASTM E381

E381S = 1	**E381R = 1**	**E381C = 2**

Hardenability:

DI (IN) = 1.36

Mechanical:

All products produced are weld free
Mercury in any form has not been used in the production or testing of this material
This document is in compliance with EN 10204 "type 3.1"
NDT equipment calibrated by OEM

Chris Kelly

CHRIS KELLY
DIVISION METALLURGIST

I certify that the above figures are a true and correct copy of those contained in the records of this company.

CASTLE METALS
JVL - 002

MILL CERTIFICATION

NUCOR®
COLD FINISH WISCONSIN

Nucor Cold Finish Wisconsin, Inc
7200 South Sixth St
Oak Creek, WI 53154
USA

Page 2 of 2
MTR No: WI-MTR-024269
MTR Date: 10/1/2021

Sold To: C00161
CASTLE METALS
1420 KENSINGTON RD
STE 220
OAK BROOK, IL 60523
USA

Ship To: C00387
A M CASTLE & CO-JANESVILLE
3800 ENTERPRISE DR
JANESVILLE, WI 53546
USA

Nucor Item No:	101824
Description:	R SQ 1.75" 1045Q2 12' -CD
Customer PO No/ Line No:	576464/1
Customer Part No:	30432
Nucor SO No/ Line No:	WI-SO-018627/1
BOL No:	WI-BOL-005052
Nucor Load No:	3400007005
Heat No:	10010637923
Quantity Shipped:	2,007 LB
Bundles:	1
Furnace batch number	

Product Description
R SQ 1.75" 1045Q2 12' -CD

Other Tests and Remarks:

Grain Practice = FINE Reduction Ratio = 13.36

All products produced are weld free
Mercury in any form has not been used in the production or testing of this material
This document is in compliance with EN 10204 "type 3.1"
NDT equipment calibrated by OEM

Chris Kelly

CHRIS KELLY
DIVISION METALLURGIST
I certify that the above figures are a true and correct copy of those contained in the records of this company.