



IDENTIFICATION OF REINFORCEMENT BAR MARKINGS

The pages that follow provide a guide to identifying bar steel reinforcement based on mill markings rolled into the surface of deformed bars. The producing mill, bar size, steel type, and grade can be identified from the markings. Markings for many of the common suppliers to WisDOT are illustrated. This guide is provided for information only and may be subject to change.

Please note that all bar steel reinforcement shipments are to be properly bundled and tagged with the manufacturer's heat number or test identification numbers. Follow the guidelines of the Construction and Materials Manual (CMM), 8.50, for acceptance and sampling of concrete masonry reinforcement steel. Users can link to the CMM via <http://roadwaystandards.dot.wi.gov/standards/cmm/>.



The contents of this guide are derived in large part from electronic documents provided by the Illinois DOT.

INSTRUCTIONS FOR IDENTIFICATION OF REINFORCEMENT BAR MARKINGS

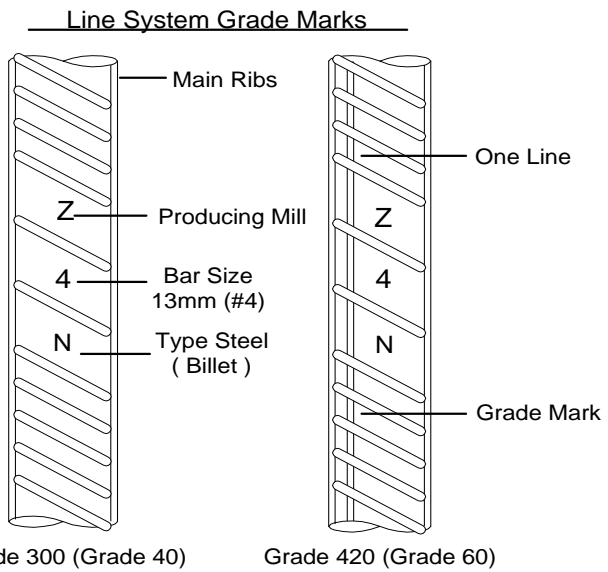
The specifications for billet steel, axle steel, and rail steel reinforcement bars (AASHTO M 31M, M 42M, and M 53M / ASTM A 615M, A 616M, and A 617M, respectively) require identification marks to be rolled into the surface of one side of the bar to denote the producer's mill designation, bar size, type of steel, and, for Grade 420 (Grade 60), a grade mark indicating yield strength. Grade 300 (Grade 40) bars show only three marks (no grade mark) usually in the following order:

- 1st — Producing Mill (usually an initial)
- 2nd — Bar Size Number (10 mm - 36 mm [#3 - #11], 43 mm [#14], and 57 mm [#18])
- 3rd — Type Steel:

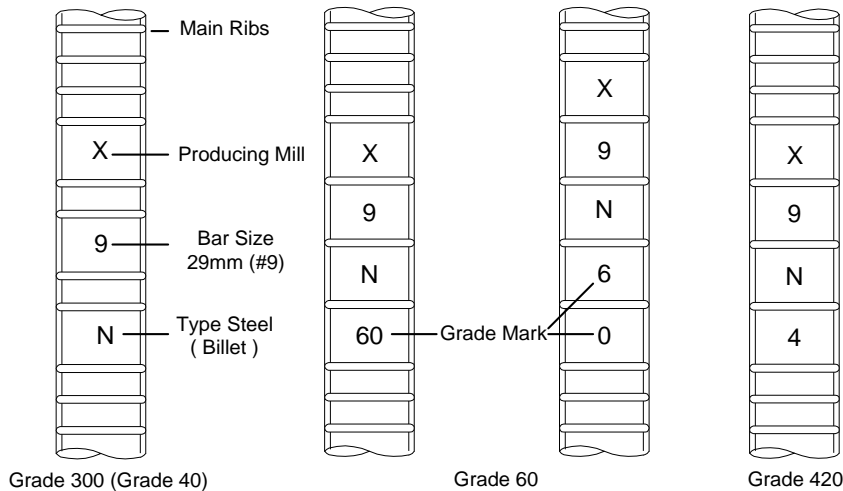
- N** for Billet
- S** for Billet meeting supplementary bend requirements
- W** for Weldable steel ASTM A-706
- A** for Axle
- I** for Rail

Grade 420 (Grade 60) bars must also show a minimum yield designation grade mark of either the number "4" ("60") or one grade mark line continued for at least five deformation spaces.

A grade mark line is smaller than and between the two main ribs, which are sometimes on the opposite side of the bar. When a numerical grade is used, it is the 4th in order.



Number System Grade Marks

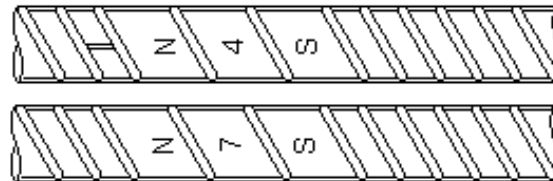


P/S#	P/S Name	City, State	Eff Date	Status
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1443-01

1443-01 North Star Steel Co. St. Paul, MN 02/01/99 CERT
 Bar, Deform Billet English

Upper bar #4 through #6 & Lower bar #7 through #11. Grade 60 has grade line on the backside.



1443-01 North Star Steel Co. St. Paul, MN 02/01/99 CERT
 Bar, Deform Billet Soft Metric

Bar sizes 13mm - 36mm (#4 - #11). Grade 60 has grade line on the backside of the bar.



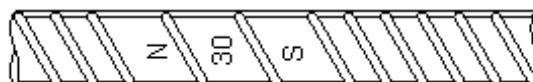
1443-01 North Star Steel Co. St. Paul, MN 02/01/99 CERT
 Bar, Deform Billet Soft Metric

Bar sizes 43mm & 57mm (#14 - #18). Grade 60 has grade line on the backside of the bar.



1443-01 North Star Steel Co. St. Paul, MN 06/10/99 CERT
 Bar, Deform Billet Hard Metric

Grade 400 (Grade 60) has grade line on the backside of the bar.

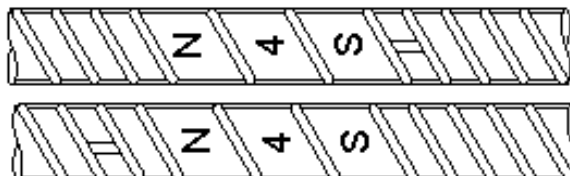


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1443-02

1443-02 North Star Steel Co. Wilton, IA 02/01/99 CERT
 Bar, Deform Billet English

Grade 60 has grade line on the backside of the bar.



1443-02 North Star Steel Co. Wilton, IA 02/01/99 CERT
 Bar, Deform Billet Soft Metric

Grade 420 (Grade 60) has grade line on the backside of the bar.



P/S#	P/S Name	City, State	EffDate	Status
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2394-10

2394-10 Nucor Steel Bourbonnais, IL 12/30/02 CERT
 Bar, Deform Billet English



2394-10 Nucor Steel Bourbonnais, IL 12/30/02 CERT
 Bar, Deform Billet Hard Metric

Grade 420 (Grade 60) bar with one continuous line on the backside, through the length of the bar.



2394-10 Nucor Steel Bourbonnais, IL 12/30/02 CERT
 Bar, Deform Billet Soft Metric

Grade 300 (Grade 40).



P/S#	P/S Name	City, State	EffDate	Status
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2394-10 Nucor Steel Bourbonnais, IL 12/30/02 CERT
 Bar, Deform Billet Soft Metric

Grade 420 (Grade 60) bar with one continuous line through the length of the bar.



2394-10 Nucor Steel Bourbonnais, IL 12/30/02 CERT
 Bar, Deform Billet Soft Metric

Grade AS TM A-706 (Grade 400) weldable reinforcing steel, with a continuous line.

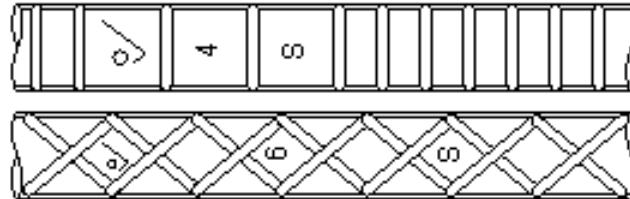


P/S#	P/S Name	City, State	EffDate	Status
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3453-02

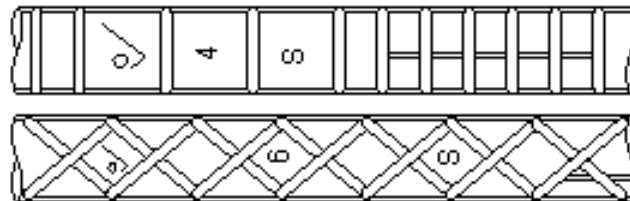
3453-02 S M I S teel - South Carolina West Columbia, S C 02/01/99 CERT
 Bar, Deform Billet English

Upper bar #3 through #11 Grade 40. Lower bar #6 through #18 Grade 40.



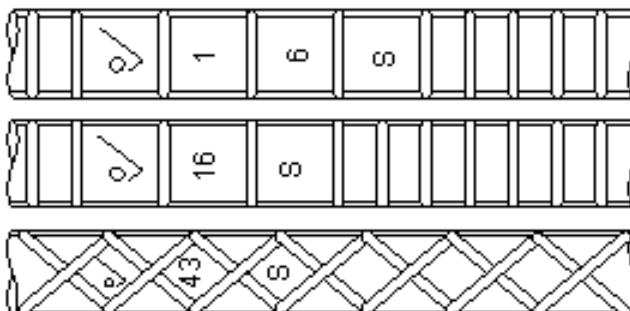
3453-02 S M I S teel - South Carolina West Columbia, S C 02/01/99 CERT
 Bar, Deform Billet English

Upper bar #3 through #11 Grade 60. Lower bar #6 through #18 Grade 60 line through five deformations.



3453-02 S M I S teel - South Carolina West Columbia, S C 08/02/00 CERT
 Bar, Deform Billet Soft Metric

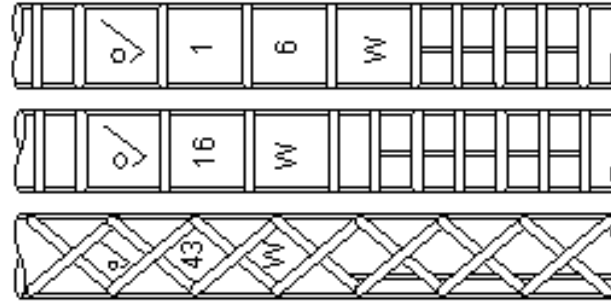
Grade 300 (Grade 40).



P/S#	P/S Name	City, State	EffDate	Status
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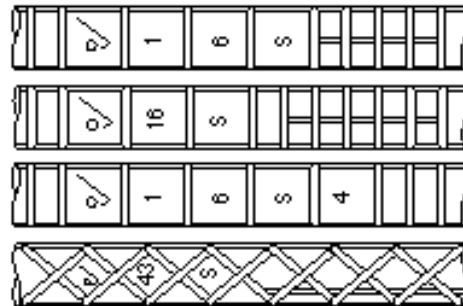
3453-02 S M I S teel - S outh Carolina West Columbia, S C 08/02/00 CERT
 Bar, Deform Billet Soft Metric

Upper 13mm through 36mm Gr. A 706. Lower 43mm through 57mm Gr. A 706 line through five spaces.



3453-02 S M I S teel - S outh Carolina West Columbia, S C 10/11/01 CERT
 Bar, Deform Billet Soft Metric

Upper 13mm through 36mm Gr. 420 (Gr. 60). Lower 43mm through 57mm Gr. 420 (Gr. 60).



P/S#	P/S Name	City, State	EffDate	Status
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525-01

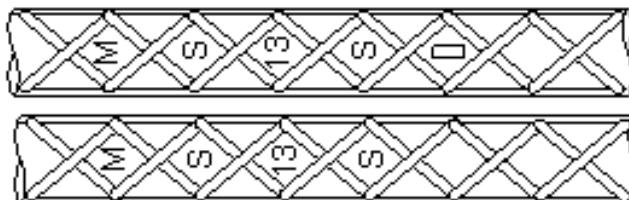
525-01 Marion Steel Co. Marion, OH 02/01/99 CERT
 Bar, Deform Billet English
 Grade 40 without continuous grade line.



525-01 Marion Steel Co. Marion, OH 02/01/99 CERT
 Bar, Deform Billet English
 Grade 60 with continuous grade line.



525-01 Marion Steel Co. Marion, OH 02/01/99 CERT
 Bar, Deform Billet Soft Metric
 Upper bar 13mm & 16mm, Lower bar 19mm thru 36mm (Grade 60) with continuous grade line on the back.



525-01 Marion Steel Co. Marion, OH 06/09/99 CERT
 Bar, Deform Billet Hard Metric
 Grade 400 (Grade 60) has grade line on the backside of the bar.



P/S#	P/S Name	City, State	EffDate	Status
6024-02	Gerdau AmeriSteel	Charlotte, NC	10/11/01	CERT
	Bar, Deform Billet	Soft Metric		

Grade AS TM A-706 weldable reinforcing steel, upper bar old design.

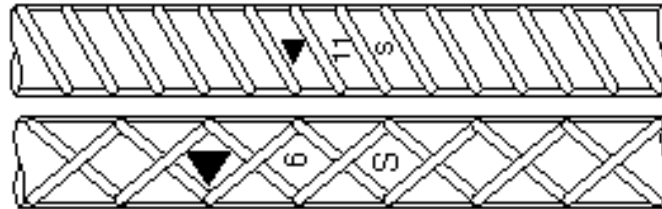


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6024-03

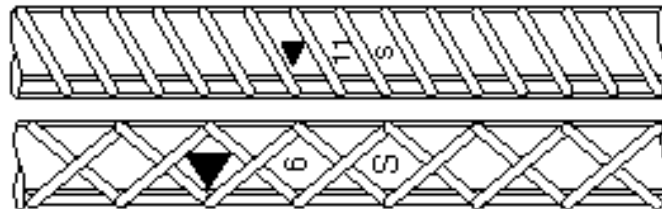
6024-03 Gerdau AmeriSteel Jackson, TN 02/01/99 CERT
 Bar, Deform Billet English

The upper bar is a #11, #14 & #18 grade 40. The lower bar is a #4 thru #10 grade 40.



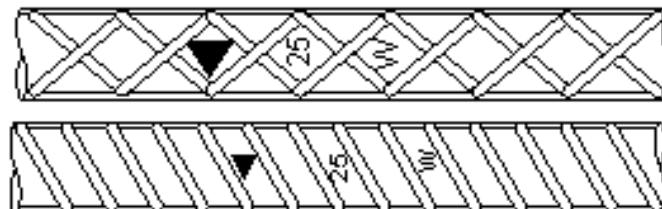
6024-03 Gerdau AmeriSteel Jackson, TN 02/01/99 CERT
 Bar, Deform Billet English

The upper bar is a #11, #14 & #18 grade 60. The lower bar is a #4 thru #10 grade 60.



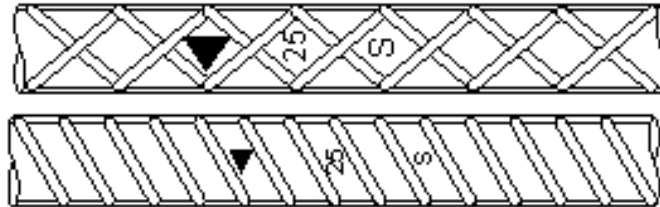
6024-03 Gerdau AmeriSteel Jackson, TN 02/01/99 CERT
 Bar, Deform Billet Soft Metric

The upper bar is a 10mm through 36mm, and the lower is a 43mm & 57mm ASTM A 706 weldable bar.



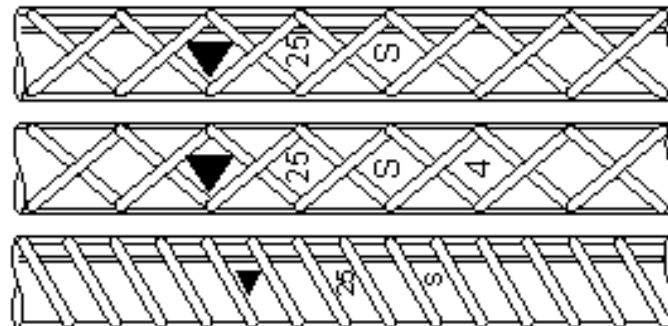
P/S#	P/S Name	City, State	EffDate	Status
6024-03	Gerlau AmeriSteel Bar, Deform Billet	Jackson, TN	02/01/99	CERT

The upper bar is a 10mm through 36mm, and the lower is a 43mm & 57mm grade 40 bar.



6024-03	Gerlau AmeriSteel Bar, Deform Billet	Jackson, TN	10/11/01	CERT
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The upper bar is a 10mm through 36mm, and the lower is a 43mm & 57mm grade 60 bar.



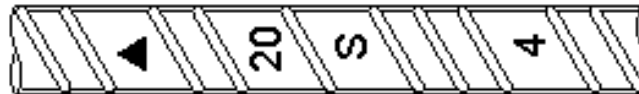
P/S#	P/S Name	City, State	EffDate	Status
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6024-04

6024-04 Gerdau AmeriS teal Knoxville, TN 02/01/99 CERT
 Bar, Deform Billet English
 Grade 60 bar.



6024-04 Gerdau AmeriS teal Knoxville, TN 02/01/99 CERT
 Bar, Deform Billet Hard Metric
 Grade 400(Grade 60) bar.



6024-04 Gerdau AmeriS teal Knoxville, TN 09/27/99 CERT
 Bar, Deform Billet Soft Metric
 Grade 420 (Grade 60) bar.



P/S#	P/S Name	City, State	EffDate	Status
6024-05	Gerdau AmeriS teal Bar, Deform Billet	Sayreville, NJ	02/01/99	CERT

Hard Metric

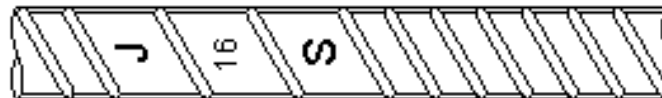
Grade 400 bar, "." and ".." may or may not appear on #10 through #20 bars of the same size & heat.



6024-05	Gerdau AmeriS teal Bar, Deform Billet	Sayreville, NJ	02/01/99	CERT
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Soft Metric

Grade 300 (Grade 40).



6024-05	Gerdau AmeriS teal Bar, Deform Billet	Sayreville, NJ	02/01/99	CERT
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Soft Metric

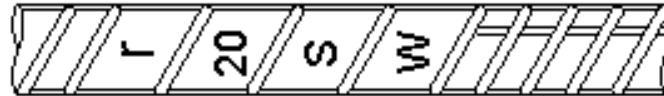
Grade 420 (Grade 60).



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6024-06

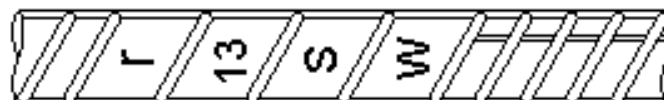
6024-06 Gerdau AmeriS teel Perth Amboy, NJ 09/11/2000 CERT
 Bar, Deform Billet Hard Metric
 Coiled Bar: ASTM A-706 Grade 420 (Grade 60).



6024-06 Gerdau AmeriS teel Perth Amboy, NJ 09/11/2000 CERT
 Bar, Deform Billet Hard Metric
 Coiled Bar: Grade 420 (Grade 60).



6024-06 Gerdau AmeriS teel Perth Amboy, NJ 09/11/2000 CERT
 Bar, Deform Billet Soft Metric
 Coiled Bar: ASTM A-706 Grade 420 (Grade 60).



6024-06 Gerdau AmeriS teel Perth Amboy, NJ 09/11/2000 CERT
 Bar, Deform Billet Soft Metric
 Coiled Bar: Grade 420 (Grade 60).

