All Standard Specification deformed billet steel bars manufactured to AASHTO M 31 (M 31M) and axle-steel bars manufactured to AASHTO M 53 (M 53M) are to be identifiable by a distinguishing set of marks legibly rolled into the surface of one side of the bar to denote in the following order:

1. **Point of Origin** - Letter or symbol established as the producers mill designation. (Photographs are included later in this publication to help identify products from approved producers)

2. **Size Designation** - Number corresponding to the bar designation number. Number may be either the Inch-Pound or Metric corresponding option as listed in the following table:

<table>
<thead>
<tr>
<th>Size Designation</th>
<th>Nominal Diameter</th>
<th>Nominal Cross-Sectional Area</th>
<th>Nominal Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inch-Pound</td>
<td>Metric</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inches</td>
<td>mm</td>
<td>in²</td>
</tr>
<tr>
<td>3</td>
<td>0.375</td>
<td>9.5</td>
<td>0.11</td>
</tr>
<tr>
<td>4</td>
<td>0.500</td>
<td>12.7</td>
<td>0.20</td>
</tr>
<tr>
<td>5</td>
<td>0.625</td>
<td>15.9</td>
<td>0.31</td>
</tr>
<tr>
<td>6</td>
<td>0.750</td>
<td>19.1</td>
<td>0.44</td>
</tr>
<tr>
<td>7</td>
<td>0.875</td>
<td>22.2</td>
<td>0.60</td>
</tr>
<tr>
<td>8</td>
<td>1.000</td>
<td>25.4</td>
<td>0.79</td>
</tr>
<tr>
<td>9</td>
<td>1.128</td>
<td>28.7</td>
<td>1.00</td>
</tr>
<tr>
<td>10</td>
<td>1.270</td>
<td>32.3</td>
<td>1.27</td>
</tr>
<tr>
<td>11</td>
<td>1.410</td>
<td>35.8</td>
<td>1.56</td>
</tr>
<tr>
<td>14</td>
<td>1.693</td>
<td>43.0</td>
<td>2.25</td>
</tr>
<tr>
<td>18</td>
<td>2.257</td>
<td>57.3</td>
<td>4.00</td>
</tr>
</tbody>
</table>
3. **Type of Steel** - Letter(s) indicating steel type. Letter(s) will be as listed in the first column of the following table:

<table>
<thead>
<tr>
<th>Type of Steel Letter(s)</th>
<th>Indicating bar was produced:</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>to meet AASHTO M 31 (M 31M)</td>
</tr>
<tr>
<td>SW</td>
<td>for Grade 60 (420) bars only; to meet both AASHTO M 31 (M 31M) and ASTM A 706 (A 706M)</td>
</tr>
<tr>
<td>A</td>
<td>from axle steel to meet AASHTO M 53 (M 53M)</td>
</tr>
</tbody>
</table>

4. **Minimum Yield Designation** - Numeric or optional line markings (grade lines) as listed in the following table:

<table>
<thead>
<tr>
<th>Minimum Yield Numbers</th>
<th>Indicating Grade (minimum yield)</th>
<th>Minimum Yield Optional Line Marking - Lines used in lieu of Numbers -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inch-Pound</td>
<td>Metric</td>
<td>Inch-Pound</td>
</tr>
<tr>
<td>None</td>
<td>None</td>
<td>40 (40,000 psi)</td>
</tr>
<tr>
<td>60</td>
<td>4</td>
<td>60 (60,000 psi)</td>
</tr>
<tr>
<td>75*</td>
<td>5</td>
<td>75 (75,000 psi)</td>
</tr>
</tbody>
</table>

* Grade 75 (5) information is not applicable to AASHTO M 53 (M 53M) axle steel bars
Note: Per Oklahoma DOT Standard Specification 723.01 and 723.02, all reinforcing steel bars are to be furnished Grade 60 (420) unless otherwise specified and shown on the plans.

On the following pages are photographs of reinforcing steel bars approved for use by Oklahoma DOT Materials Division. Photographs are primarily for the purpose of relaying unique point of origin letters and symbols and deformation patterns.
P/S m00517
Nucor Steel Birmingham (Birmingham, AL)
(Grade line option indicated)
P/S m00293
CMC Steel Tennessee (Knoxville, TN)
(Continued)
P/S m00293
CMC Steel Tennessee (Knoxville, TN)
P/S m00518
Nucor Steel (Jackson, MS)
(Grade line option indicated)
P/S m00058
Gerdau Ameristeel (Sand Springs, OK)

(Old) Mill Marking before Jan. 1, 2009

[Image of old mill marking]

(New) Mill Marking effective Jan. 1, 2009

[Image of new mill marking]
P/S m00516
CMC Steel Texas (Seguin, TX) - Name changed from SMI-Texas 3/1/2006

Bars #10 through #36 only (Inch-Pound equivalent: #3 through #11)

Bars #43 and #57 only (Inch-Pound equivalent: #14 and #18)
P/S m00661
Mid America Steel & Wire (Madill, OK)
P/S m00669
**Nucor Steel (Jewett, TX)**
The dot under the 4 is an optional, manufacturing control marking. Bars may have more than one dot.
P/S m00744
Gerdau Ameristeel (Beaumont, TX)
P/S m00809
Nucor Steel (Plymouth, UT)
P/S m00811
Nucor Steel Kankakee (Bourbonnais, IL)

Rebar Grade Identification

- GRADE LINE FOR 420 / 400R IS ONE CONTINUOUS LINE
- GRADE LINE FOR 520 IS TWO CONTINUOUS LINES
- A706 / 400W IS ONE CONTINUOUS LINE WITH THE LETTER “W”
- MG MATERIAL WILL NOT HAVE THE “S” MARK OR GRADE LINE
P/S m00829
ArcelorMittal - Harriman Plant (Harriman, TN)
P/S m00681
Gerda Ameristeele (Midlothian, TX)
P/S m00849
CMC Steel Arizona (Mesa, AZ)
P/S m00931
CMC Steel South Carolina (Caycee, SC)

SET # 17-002
#3 REBAR

PITCH = .250”
PASS DEPTH = .138”
CORR. DEPTH = .024”
FINAL DEPTH = .162”
BRANDING DEPTH = .190” +/- .002”
ELECTRODE SIZE = 1/4”

GRADE 40  GRADE 60  GRADE 75  A706W (60)  NO GRADE  A706W (80)  GRADE 80
YELLOW   FLUOR GREEN  BLUE  WHITE  GREEN  GOLD  PURPLE

SET # 17-003
#4 REBAR

PITCH = .337”
PASS DEPTH = .190”
CORR. DEPTH = .032”
FINAL DEPTH = .222”
BRANDING DEPTH = .202” +/- .002”
ELECTRODE SIZE = 5/16”

GRADE 40  GRADE 60  GRADE 75  A706W (60)  NO GRADE  A706W (80)  GRADE 80
YELLOW   FLUOR GREEN  BLUE  WHITE  GREEN  GOLD  PURPLE
(Continued)
P/S m00931
CMC Steel South Carolina (Caycee, SC)
(Continued)
P/S m00931
CMC Steel South Carolina (Caycee, SC)

SET # 17-006
#7 REBAR

- GRADE 40: YELLOW
- GRADE 60: FLUOR GREEN
- GRADE 75: BLUE
- A706W (60): WHITE
- A706W (80): GOLD
- GRADE 80: PURPLE

PITCH = .596"
PASS DEPTH = .352"
CORR. DEPTH = .060"
FINAL DEPTH = .412"
BANDING DEPTH = .382" +/- .002"
ELECTRODE SIZE = 3/8"

SET # 15-007
#8 REBAR

- GRADE 40: YELLOW
- GRADE 60: FLUOR GREEN
- GRADE 75: BLUE
- A706W (60): WHITE
- A706W (80): GOLD
- GRADE 80: PURPLE

PITCH = .686"
PASS DEPTH = .414"
CORR. DEPTH = .072"
FINAL DEPTH = .486"
BANDING DEPTH = .450" +/- .002"
ELECTRODE SIZE = 3/8"
(Continued)
P/S m00931
CMC Steel South Carolina (Caycee, SC)

SET # 13-008
#9 REBAR

<table>
<thead>
<tr>
<th>Grade</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Yellow</td>
</tr>
<tr>
<td>60</td>
<td>Fluor Green</td>
</tr>
<tr>
<td>75</td>
<td>Blue</td>
</tr>
<tr>
<td>A706W (60)</td>
<td>White</td>
</tr>
<tr>
<td>A706W (80)</td>
<td>Gold</td>
</tr>
<tr>
<td>Grade 80</td>
<td>Purple</td>
</tr>
</tbody>
</table>

PITCH = .774"
PASS DEPTH = .475"
CORR. DEPTH = .080"
FINAL DEPTH = .555"
BRANDING DEPTH = .515" +/- .002"
ELECTRODE SIZE = 1/2"

SET # 13-009
#10 REBAR

<table>
<thead>
<tr>
<th>Grade</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Yellow</td>
</tr>
<tr>
<td>60</td>
<td>Fluor Green</td>
</tr>
<tr>
<td>75</td>
<td>Blue</td>
</tr>
<tr>
<td>A706W (60)</td>
<td>White</td>
</tr>
<tr>
<td>A706W (80)</td>
<td>Gold</td>
</tr>
<tr>
<td>Grade 80</td>
<td>Purple</td>
</tr>
</tbody>
</table>

PITCH = .871"
PASS DEPTH = .538"
CORR. DEPTH = .100"
FINAL DEPTH = .638"
BRANDING DEPTH = .586" +/- .002"
ELECTRODE SIZE = 1/2"
(Continued)
P/S m00931
CMC Steel South Carolina (Caycee, SC)

| SET # 13-010 | PITCH = .967” |
| #11 REBAR | PASS DEPTH = .610” |
| | CORR. DEPTH = .105” |
| | FINAL DEPTH = .715” |
| | BRANDING DEPTH = .082” +/- .002” |
| | ELECTRODE SIZE = 1/2” |

| GRADE 40 | GRADE 60 | GRADE 75 | A706W (60) | A706W (80) | GRADE 80 |
| YELLOW | FLUOR GREEN | BLUE | WHITE | GOLD | PURPLE |
(Continued)
P/S m00931
CMC Steel South Carolina (Caycee, SC)

SET #11—011
#14 REBAR

<table>
<thead>
<tr>
<th>GRADE 40</th>
<th>GRADE 60</th>
<th>GRADE 75</th>
<th>A706W (60)</th>
<th>A706W (80)</th>
<th>GRADE 80</th>
</tr>
</thead>
<tbody>
<tr>
<td>YELLOW</td>
<td>FLUOR GREEN</td>
<td>BLUE</td>
<td>WHITE</td>
<td>GOLD</td>
<td>PURPLE</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>S</td>
<td>S</td>
<td>S</td>
<td>W</td>
<td>W</td>
<td>S</td>
</tr>
</tbody>
</table>
(Continued)
P/S m00931
CMC Steel South Carolina (Caycee, SC)

SET #09-012
#18 REBAR

PITCH = 1.540"
PASS DEPTH = .976"
CORR. DEPTH = .125"
FINAL DEPTH = 1.101"
BRANDING DEPTH = 1.025" +/- .002"
ELECTRODE SIZE = 1/2"
PROGRAM #57

GRADES:
- GRADE 40: YELLOW
- GRADE 60: FLUOR GREEN
- GRADE 75: BLUE
- A706W: WHITE
- A706W (80): GOLD
- GRADE 80: PURPLE
P/S m00983
CMC Steel Florida (Jacksonville, FL)

CMC Steel Florida – Final marking – no interim markings required.
P/S m00995
Keystone Steel & Wire (Peoria, IL)

Keystone Steel & Wire Co.
(Peoria, IL)

Coiled bars #10 through #16 only

05.29.2013
P/S m01000
_Gerdau Steel (St. Paul, MN)_

Gerdau Ameristeel (revised markings)
(St. Paul, MN)

S

08.09.2013

Bars #13 through #57 only
P/S m01013
Gerda Ameristeel (Charlotte, NC)

Gerda Ameristeel (revised markings)
(Charlotte, NC)

S

Bars #13 through #25 only

W

Bars #13 through #25 only

01.24.2014
P/S m01053
CMC Steel New Jersey (Sayreville, NJ)
(Continued)
P/S m01053
**CMC Steel New Jersey (Sayreville, NJ)**
P/S m01127
CMC Steel Oklahoma (Durant, OK)
11/4/2008 Revision: Added new mill marking for P/S m00058 Gerdau Ameristeel (Sand Springs, OK)

04/14/2009 Revision: Replaced photograph for P/S m00661 Mid America Steel & Wire (Madill, OK) due to new deformation pattern.

07/29/2009 Revision: Added P/S m00809 Nucor Steel (Plymouth, UT) and their details

08/04/2009 Revision: Added P/S m00811 Nucor Steel Kankakee (Bourbonnais, IL) and their details.

08/28/2009 Revision: Added P/S m00824 ArcelorMittal - Vinton Plant (El Paso, TX) and their details

01/06/2010 Revision: Added P/S m00829 ArcelorMittal - Harriman Plant (Harriman, TN) and their details.

01/27/2010 Revision: Updated P/S m00681 Gerdau Ameristeel (Midlothian, TX) and their details.

03/18/2010 Revision: Added P/S m00849 CMC Steel Arizona (Mesa, AZ) and their details

10/18/2011 Revision: Added P/S m00931 CMC Steel South Carolina (Caycee, SC) and their details

10/26/2011 Revision: Replaced photographs for P/S m00293 Gerdau Ameristeel (Knoxville, TN) and P/S m00744 Gerdau Ameristeel (Beaumont, TX) due to changed bar markings.

12/10/2012 Revision: Added P/S m00983 Gerdau Steel (Jacksonville, FL) and their details.

05/29/2013 Revision: Added P/S m00995 Keystone Steel & Wire (Peoria, IL) and their details.

08/09/2013 Revision: Added P/S m01000 Gerdau Steel (St. Paul, MN) and their details

01/24/2014 Revision: Added P/S m01013 Gerdau Ameristeel (Charlotte, NC) and their details

03/10/2014 Revision: Replaced old diagram with new diagrams for P/S m00931 CMC Steel South Carolina (Caycee, SC) due to a change in pattern (from Bamboo to Spiral) on all sizes and grades.

02/15/2018 Revision: Added P/S m001127 CMC Steel Oklahoma (Durant, OK) and their details

11/08/2018 Renamed P/S m00293 Gerdau Ameristeel (Knoxville, TN) to CMC Steel Tennessee (Knoxville, TN) and replaced old diagram with two new diagrams. Renamed P/S m00983 Gerdau Steel (Jacksonville, FL) to CMC Steel Florida (Jacksonville, FL) and replaced old diagram with new diagram. Added P/S m01053 CMC Steel New Jersey (Sayreville, NJ) and two diagrams.