

AMS 4122A

Society of Automotive Engineers, Inc.
29 West 39th Street
New York City

Issued 10-1-45

Revised 7-1-47

A L U M I N U M A L L O Y R O L L E D B A R S

5.6 Zn - 2.5 Mg - 1.5 Cu - .25 Cr

75S-T

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. FORM: Rods, bars, and shapes.

- | | | |
|------------------------|-------------------------|-------------|
| 3. <u>COMPOSITION:</u> | Zinc | 5.1 - 6.1 |
| | Magnesium | 2.1 - 2.9 |
| | Copper | 1.2 - 2.0 |
| | Chromium | 0.15 - 0.40 |
| | Iron | 0.70 max |
| | Silicon | 0.50 max |
| | Ø Manganese | 0.30 max |
| | Titanium | 0.20 max |
| | Other Impurities, each | 0.05 max |
| | Other Impurities, total | 0.15 max |
| | Aluminum | remainder |

4. CONDITION: (a) Solution and precipitation heat treated conforming to the following minimum physical properties:

Tensile Strength, psi	77,000
Yield Strength (0.2% Offset), psi	66,000
Equivalent Extension Under Load, in. in 2 in.	0.0167
Elongation, % in 4D	6

(b) The physical properties specified apply to rounds and squares from 0.125 to 3.0 inches, to hexagons from 0.125 to 2.0 inches, to octagons from 0.125 to 1.188 inches, and to rectangles from 0.375 x 0.375 to 3.0 x 10.0 inches. If other sizes are ordered, physical properties shall be as agreed between vendor and purchaser.

(c) The product shall have hardness not lower than Brinell 135, using 500 kg load and 10 mm ball or the equivalent, but shall not be rejected on the basis of hardness if it conforms to the minimum tensile requirements.

(d) Unless otherwise agreed, rounds, squares, hexagons and octagons 1.5 inches and under in diameter or distance between parallel sides and rectangles up to 3 inches wide having a nominal cross-sectional area not greater than 3 square inches shall be supplied cold finished.

5. QUALITY: (a) The product shall be uniform in quality and condition, clean, sound, smooth, and free from foreign material and from internal and external defects detrimental to fabrication or to performance to parts. Rods, bars, and shapes in which defects are revealed during fabrication will be subject to rejection.

6. TOLERANCES: (a) Unless otherwise specified, tolerances for rounds, squares, hexagons and octagons 1.5 inches and under in diameter or distance between parallel sides and rectangles up to 3 inches wide having a nominal cross-sectional area not greater than 3 square inches shall conform to the latest issue of AMS 2201 for cold finished bars.