

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 4114

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Revised

ALUMINUM ALLOY BARS (ROLLED) 2.5Mg - 0.25Cr (52S-F)

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. **FORM:** Rods, bars, or as ordered.
3. **APPLICATION:** Primarily parts requiring somewhat greater strength than AMS 4102 and where forming or welding may be required in fabrication.
4. **COMPOSITION:**

Magnesium	2.20 - 2.80
Chromium	0.15 - 0.35
Iron + Silicon	0.45 max
Manganese	0.10 max
Copper	0.10 max
Zinc	0.10 max
Other impurities, each	0.05 max
Other impurities, total	0.15 max
Aluminum	remainder
5. **CONDITION:** As fabricated, unless otherwise specified.
6. **QUALITY:** Material shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts.
7. **TOLE RANCES:** Unless otherwise specified, tolerances for rods and bars shall conform to the latest issue of AMS 2201 as applicable. Diameter, thickness and width tolerances shall be as specified below:
 - 7.1 **Diameter (Rounds 1.5 in. and less):** Table V.
 - 7.2 **Diameter (Rounds over 1.5 in.):** Table I.
 - 7.3 **Thickness (Hexagons 2 in. and less):** Table V.
 - 7.4 **Thickness (Squares 1.5 in. and less):** Table V.
 - 7.5 **Thickness (Squares over 1.5 in.):** Table II.
 - 7.6 **Thickness and Width (Rectangles not over 1.5 in. thick or 4 in. wide):** Table V.
 - 7.7 **Thickness and Width (Rectangles over 1.5 in. thick or 4 in. wide):** Table II.

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