

AERONAUTICAL MATERIAL SPECIFICATION

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

AMS 4114A

Issued 7-1-48

Revised 12-1-51

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

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, or as ordered.

3. APPLICATION: Primarily for parts requiring somewhat greater strength than AMS 4102 and where forming or welding may be required in fabrication.

4. COMPOSITION:

Magnesium	2.2 - 2.8
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. TOLERANCES: Unless otherwise specified, tolerances 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 3 in. and under: Table V.

7.2 Diameter, Rounds over 3 in.: Table I.

7.3 Thickness, Hexagons 2 in. and under, and Squares 1.5 in. and under: Table V.

7.4 Thickness, Hexagons over 2 in. and Squares over 1.5 in.: Table II.

7.5 Thickness and Width, Rectangles not over 1.5 in. thick or 4 in. wide: Table V.

7.6 Thickness and Width, Rectangles over 1.5 in. thick or 4 in. wide: Table II.

Section 7C of the SAE Technical Board rules provides that: "All technical reports, including standards approved and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no agreement to adhere to any SAE standard or recommended practice, and no commitment to conform to or be guided by any technical report. In formulating and approving technical reports, the Board and its Committees will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against liability for infringement of patents."