

AEROSPACE MATERIAL SPECIFICATION

SAE AMS4114

REV. J

Issued 1948-06
Revised 2006-06
Cancelled 2012-01

Superseded by ASTM B 211

Aluminum Alloy Bars and Rods, Rolled or Cold-Finished
2.5Mg - 0.25Cr (5052-F)
As Fabricated

(Composition similar to UNS A95052)

RATIONALE

AMS4114J cancels this document and supersedes it with ASTM B 211, Alloy 5052-F, Rod and Bar.

CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of January 2012 and has been superseded by ASTM B 211, Alloy 5052-F, Rod and Bar. The requirements of the latest issue of ASTM B 211, Alloy 5052-F, Rod and Bar shall be fulfilled whenever reference is made to the cancelled AMS4114. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications, noting that it has been superseded by ASTM B 211, Alloy 5052-F, Rod and Bar.

Cancelled specifications are available from SAE.

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on this Technical Report, please visit
<http://www.sae.org/technical/standards/AMS4114J>**

1. SCOPE

1.1 Form

This specification covers an aluminum alloy in the form of bars and rods.

1.2 Application

Primarily for parts requiring good formability and weldability in fabrication and moderate strength, but usage is not limited to such applications.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

AMS 2355	Quality Assurance Sampling and Testing of Aluminum Alloys and Magnesium Alloys, Wrought Products (Except Forging Stock) and Flash-Welded Rings
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2.2 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM B 660	Packaging/Packing of Aluminum and Magnesium Products
ASTM B 666	Identification Marking of Aluminum and Magnesium Products

2.3 ANSI Publications

Available from American National Standards Institute, 25 West 43rd Street, New York, NY 10036, Tel: 212-642-4900, www.ansi.org.

ANSI H35.2 Dimensional Tolerances for Aluminum Mill Products

3. TECHNICAL REQUIREMENTS

3.1 Composition

Shall conform to the following percentages by weight shown in Table 1, determined in accordance with AMS 2355:

TABLE 1 - COMPOSITION

Element	min	max
Silicon	--	0.25
Iron	--	0.40
Copper	--	0.10
Manganese	--	0.10
Magnesium	2.2	2.8
Chromium	0.15	0.35
Zinc	--	0.10
Other Elements, each	--	0.05
Other Elements, total		0.15
Aluminum	remainder	

3.2 Condition

Rolled or cold-finished, as ordered, in the as-fabricated condition.

3.3 Quality

The product, as received by purchaser, shall be uniform in quality and condition, sound, and free from foreign materials and from imperfections detrimental to usage of the product.

3.4 Tolerances

Shall conform to all applicable requirements of ANSI H35.2.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for Inspection

The vendor of the product shall supply all samples for vendor's tests and shall be responsible for the performance of all required tests. Purchaser reserves the right to sample and to perform any confirmatory testing deemed necessary to ensure that the product conforms to specified requirements.

4.2 Classification of Tests

Tests for all technical requirements are acceptance tests and shall be performed on each lot.

4.3 Sampling and Testing

Shall be in accordance with AMS 2355.