ADOPTION NOTICE

SAE-AMS-QQ-A-225/1, "Aluminum Alloy, Bar, Rod, and Wire, Rolled, Drawn, or Cold Finished, 1100", was adopted on 30-JUN-98 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Commander, Defense Industrial Supply Center, 700 Robbins Avenue, Philadelphia, PA 19111-5096. DoD activities may obtain copies of this standard from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. The private sector and other Government agencies may purchase copies from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.

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AEROSPACE MATERIAL SPECIFICATION

SAE AMS-QQ-A-225/1

Issued JUL 1997

Submitted for recognition as an American National Standard

ALUMINUM ALLOY, BAR, ROD, AND WIRE, ROLLED, DRAWN, OR COLD FINISHED, 1100

UNS A91100

NOTICE

This document has been taken directly from Federal Specification QQ-A-225/1D, Amendment 1, and contains only minor editorial and format changes required to bring it into conformance with the publishing requirements of SAE technical standards.

The original Federal Specification was adopted as an SAE standard under the provisions of the SAE Technical Standards Board (TSB) Rules and Regulations (TSB 001) pertaining to accelerated adoption of government specifications and standards. TSB rules provide for (a) the publication of portions of unrevised government specifications and standards without consensus voting at the SAE Committee level, (b) the use of the existing government specifications and standards format, and (c) the exclusion of any qualified product list (QPL) sections.

The complete requirements for procuring 1100 aluminum alloy bar, rod, and wire rolled, drawn, or cold finished described herein shall consist of this document and the latest issue of AMS-QQ-A-225.

1. SCOPE AND CLASSIFICATION:

1.1 Scope:

This specification covers the specific requirements for 1100 aluminum alloy bar, rod, and wire produced by rolling, drawing, or cold finishing.

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1.2 Classification:

1.2.1 Tempers: Bar, rod, and wire are of the following tempers as specified (See 6.2 and 6.3): O, H12, H14, H16, H18, H112, or F temper. Definitions of these tempers are specified in AMS-QQ-A-225.

2. APPLICABLE DOCUMENTS:

See AMS-QQ-A-225.

3. REQUIREMENTS:

3.1 Chemical Composition:

3.1.1 The chemical composition shall conform to the requirements specified in Table I.

TABLE I. Chemical Composition 1/

Element	Percent	
	Minimum	Maximum
Copper	0.05	0.20
(See 6.6) Iron plus silicon	-	0.95
Zinc	-	0.10
Manganese	-	0.05
Other Elements, each	-	0.05
Other Elements, total	-	0.15
Aluminum (by difference)	99.00	-

1/ Analysis shall routinely be made only for the elements specifically mentioned in Table I. If, however, the presence of other elements is indicated or suspected in the course of routine analysis, further analysis shall be made to determine conformance to the limits specified for other elements.

3.2 Mechanical Properties:

3.2.1 Mechanical Properties of Materials as Supplied: The mechanical properties in the direction of working shall conform to the requirements of Table II for the temper specified.

TABLE II. Mechanical Properties (See 6.5)

Temper	Diameter or Thickness Inches	Tensile Strength minimum ksi	Elongation in 2 in. or 4 times dia. 1/ minimum Percent
O	All sizes	11.0	25
H12	Up to 0.374, incl	14.0	--
H14	Up to 0.374, incl	16.0	--
H16	Up to 0.374, incl	19.0	--
H18	Up to 0.374, incl	22.0	--
H112	All sizes	11.0	--
F	0.375 and over	3/	3/

1/ The measurement of elongation is not required for wire less than 0.125 inch in diameter or thickness.
2/ Maximum tensile strength shall be 15.5 ksi.
3/ Mechanical properties do not apply for the F temper.

3.3 Finish:

Unless otherwise specified in the contract or purchase order (See 6.2), rod up to and including 3 inches in diameter and bar up to including 2 inches thick (with maximum width for rectangles of 4 inches) shall be supplied cold finished.

4. QUALITY ASSURANCE PROVISIONS:

See AMS-QQ-A-225.

5. PREPARATION FOR DELIVERY:

See AMS-QQ-A-225.