



AEROSPACE MATERIAL SPECIFICATION

AMS-QQ-A-200™

REV. C

Issued 1997-07
Revised 2004-08
Reaffirmed 2012-02
Stabilized 2019-11

Superseding AMS-QQ-A-200B

Aluminum Alloy, Bar, Rod, Shapes, Structural
Shapes, Tube, and Wire, Extruded:
General Specification for

RATIONALE

AMS-QQ-A-200C has been declared "STABILIZED" by SAE AMS Nonferrous Alloys Committee D because it is no longer state of the art and other documents contain technically equivalent requirements.

STABILIZED NOTICE

AMS-QQ-A-200C has been declared "STABILIZED" by SAE AMS Committee D Nonferrous Alloys. This document will no longer be updated and may no longer represent standard industry practice. This document was stabilized because it is no longer state of the art and other documents contain technically equivalent requirements. Previously this document was reaffirmed. This document has never been technically updated by Committee D. Users of this document should refer to the cognizant engineering organization for disposition of any issues with reports/certifications to this specification; including exceptions listed on the certification.

NOTE: In many cases, the purchaser may represent a sub tier supplier and not the cognizant engineering organization.

The individual detail specifications of AMS-QQ-A-200C should be reviewed for recommendations on specifications to be used for future procurement. This listing does not constitute authority to substitute these specifications for the "STABILIZED" specification.

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NOTICE

This document is intended to replace Federal Specification QQ-A-200E. The original issue and revision A of AMS-QQ-A-200 were taken directly from Federal Specification QQ-A-200E/GEN, Amendment 1, and contained only minor editorial and format changes required to bring it into conformance with the publishing requirements of SAE technical standards. This revision B changes the heat treatment specification MIL-H-6088 (cancelled) to AMS 2772 (the superseding document) to ensure that the vital heat treat parameters used for heat-treat-response-test samples conform to parameters used for heat treatment of parts (See 6.6).

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 specification or standard format, and (c) the exclusion of any qualified product list (QPL) sections.

1. SCOPE AND CLASSIFICATION:

1.1 Scope:

This specification covers the general requirements for aluminum alloy bar, rod, shapes, structural shapes, tube, and wire extruded. Specific requirements for these products in a particular alloy are covered by the applicable detailed specification (See 6.3).

1.2 Classification:

1.2.1 Tempers: Bar, rod, shapes, structural shapes, tube, and wire are classified in tempers as specified in the detailed specification. Definitions of tempers are specified in American National Standard ANSI H35.1.

1.2.2 Tubing: Tubing shall be additionally classified as follows:

Type I - Tubing extruded by the method defined in 6.4.5.1.

Type II - Tubing extruded by other methods (See 6.4.5.2).

2. APPLICABLE DOCUMENTS:

The following publications, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001 or www.sae.org.

AMS 2772 Heat Treatment of Aluminum Alloy Raw Materials

AMS-STD-184 Identification Marking of Aluminum, Magnesium, and Titanium

2.2 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094 or www.dsp.dla.mil.

MIL-STD-1916 DOD Preferred Methods for Acceptance of Product

AMS-STD-2154 Inspection, Ultrasonic, Wrought Metals, Process for

FED-STD-123 Marking for Shipment (Civil Agencies)

2.3 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 or www.astm.org.

ASTM B 557	Tension Testing Wrought and Cast Aluminum- and Magnesium-Alloy Products
ASTM B 660	Packaging/Packing of Aluminum and Magnesium Products
ASTM E 172	Emission Spectrochemical Analysis, Describing and Specifying the Excitation Source
ASTM E 1004	Electromagnetic (Eddy Current) Measurements of Electrical Conductivity
ASTM E 1282	Quantitative Analysis Methods for Metals, Ores, and Related Materials
ASTM G 34	Exfoliation Corrosion Susceptibility in 2XXX and 7XXX Series Aluminum Alloys (EXCO Test)
ASTM G 47	Determining Susceptibility to Stress-Corrosion Cracking of High-Strength Aluminum Alloy Products

2.4 ANSI Publications:

Available from ANSI, 25 West 43rd Street, New York, NY 10036 or www.ansi.org.

ANSI H35.1	Alloy and Temper Designation System for Aluminum
ANSI H35.2	Dimensional Tolerances for Aluminum Mill Products

3. REQUIREMENTS:

3.1 Specification Sheets:

The individual item requirements shall be as specified herein and in accordance with the applicable detailed specification.

3.2 Chemical Composition:

The chemical composition shall be as specified in the detailed specification.

3.3 Mechanical Properties:

3.3.1 Mechanical properties shall be as specified in the detailed specification. The elongation requirements shall not be applicable to the following:

3.3.1.1 Material of such dimensions that a standard test specimen cannot be taken in accordance with this specification, and of such shape that it cannot be satisfactorily tested in full section.

3.3.1.2 Material thinner than 0.062 inch (nominal).