SAE Aerospace
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AEROSPACE MATERIAL SPECIFICATION

SAE AMS-QQ-A-200/6	REV. B

Issued 1997-07
Revised 1998-09
Noncurrent 2007-09
Reaf Nonc 2012-09

Superseding AMS-QQ-A-200/6A

Aluminum Alloy 5454, Bar, Rod, Shapes, Tube, and Wire, Extruded

UNS A95454

RATIONALE

AMS-QQ-A-200/6B has been reaffirmed to comply with the SAE five-year review policy.

NONCURRENT NOTICE

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of September, 2007. It is recommended, therefore, that this specification not be specified for new designs.

"NONCURRENT" refers to those specifications which have previously been widely used and which may be required for production or processing of existing designs in the future. The Aerospace Materials Division, however, does not recommend these specifications for future use in new designs. "NONCURRENT" specifications are available from SAE upon request.

Similar but not necessarily identical products are covered in the following specifications. However, this listing is provided for information only and does not constitute authority to substitute these specifications for the "NONCURRENT" specification.

AMS-QQ-A-200/6	Similar Specification
Type 1 Tubing	ASTM B 241, Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube – *designating alloy 5454 and applicable temper*
Type II Tubing and all other product	ASTM B 221, Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes – *designating alloy 5454 and applicable temper*

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http://www.sae.org/technical/standards/AMSQQA200/6B

NOTICE

This document has been taken directly from Federal Specification QQ-A-200/6E, 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 specification or standard format, and (c) the exclusion of any qualified product list (QPL) sections.

The complete requirements for procuring aluminum alloy 5454 bar, rod, shapes, tube, and wire extruded described herein shall consist of this document and the latest issue of AMS-QQ-A-200.

1. SCOPE AND CLASSIFICATION:

1.1 Scope:

This specification covers the specific requirements for aluminum alloy 5454 bar, rod, shapes, tube, and wire produced by extrusion.

1.2 Classification:

1.2.1 Tempers: Bar, rod, shapes, tube, and wire are classified in the following tempers as specified (See 6.2): O, H111, or H112. Definitions of tempers are specified in AMS-QQ-A-200.

1.2.2 Tubing: Tubing shall be additionally classified as follows:

Type I - Tubing extruded from hollow billets using die and mandrel (See AMS-QQ-A-200).
Type II - Tubing extruded from solid billets using a porthole or spider die or similar tooling (See AMS-QQ-A-200).

2. APPLICABLE DOCUMENTS:

See AMS-QQ-A-200.

3. REQUIREMENTS:

3.1 Chemical Composition:

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

TABLE I. Chemical Composition 1/

Element	Percent	
	Minimum	Maximum
Magnesium	2.4	3.0
Manganese	0.50	1.0
Chromium	0.05	0.20
Silicon	--	0.25
Iron	--	0.40
Zinc	--	0.25
Titanium	--	0.20
Copper	--	0.10
Other Elements, each	--	0.05
Other Elements, total 2/	--	0.15
Aluminum	Remainder	

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.

2/ The sum of those "Others" metallic elements 0.010 percent or more each, expressed to the second decimal before determining the sum.

3.2 Mechanical Properties:

3.2.1 Mechanical Properties of Material as Supplied: The mechanical properties in the direction of extrusion shall conform to requirements specified in Table II.