



AEROSPACE MATERIAL SPECIFICATION

AMS-QQ-A-200™/3**REV. A**

Issued 1997-07
Reaffirmed 2018-05
Stabilized 2019-11

Superseding AMS-QQ-A-200/3

Aluminum Alloy 2024, Bar, Rod, Shapes,
Tube, and Wire, Extruded

A92024

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

STABILIZED NOTICE

AMS-QQ-A-200/3A has been declared "STABILIZED" by SAE AMS Non-Ferrous Alloys Committee D. This document will no longer be updated and may no longer represent standard industry practice.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.

AMS Committee D recommends that the following technically equivalent specifications be considered for future procurement. This listing does not constitute authority to substitute these specifications for the "STABILIZED" specification.

AMS4152	Aluminum Alloy Extrusions, 4.4Cu - 1.5Mg - 0.60Mn (2024-T3), Solution Heat Treated and Cold Worked
AMS4164	Aluminum Alloy, Extrusions, 4.4Cu - 1.5Mg - 0.60Mn (2024-T3510), Solution Heat Treated, Cold Worked, Stress-Relieved by Stretching, Unstraightened
AMS4165	Aluminum Alloy, Extrusions, 4.4Cu - 1.5Mg - 0.60Mn (2024-T3511), Solution Heat Treated, Cold Worked, Stress-Relieved by Stretching, and Straightened
AMS4421	Aluminum Alloy, Extrusions, 4.4Cu - 1.5Mg - 0.60Mn (2024-O), Annealed
AMS4423	Aluminum Alloy, Extrusions, 4.4Cu - 1.5Mg - 0.60Mn (2024-T8511), Solution Heat Treated, Cold Worked, Stress-Relieved by Stretching, Precipitation Heat Treated, and Straightened
AMS4481	Aluminum Alloy, Extrusions, 4.4Cu - 1.5Mg - 0.60Mn (2024-T8510), Solution Heat Treated, Cold Worked, Stress-Relieved by Stretching, and Precipitation Heat Treated, Unstraightened
AMS4491	Aluminum Alloy, Extrusions, 4.4Cu - 1.5Mg - 0.60Mn (2024-T81) Solution Heat Treated, Cold Worked, and Precipitation Heat Treated

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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 2024 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 2024 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, T3, T42, T3510, T3511, T81, T8510, or T8511. Definitions of tempers are specified in AMS-QQ-A-200.

1.2.2 Tubing: Tubing shall be additionally classified as follows:

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

2. APPLICABLE DOCUMENTS:

See AMS-QQ-A-200.