



AEROSPACE STANDARD

AS7235™**REV. A**

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Superseding AS7235

Rivets, UNS S66286,
Steel, Corrosion and Heat Resistant,
80 ksi Shear Strength,
Procurement Specification for

FSC 5320

RATIONALE

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

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Documents

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1. SCOPE:

1.1 Type:

This procurement specification covers solid rivets and hollow end rivets made from a corrosion and heat resistant steel of the type identified under the Unified Numbering System as UNS S66286 and of 80 ksi single shear strength at room temperature.

1.2 Application:

Primarily for joining corrosion resistant steel parts having high strength up to 1200 °F and requiring oxidation resistance up to approximately 1500 °F.

2. REFERENCES:

2.1 Applicable Documents:

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other documents shall be the issue in effect on the date of the purchase order.

2.1.1 SAE Publications: Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AMS 2750 Pyrometry

AMS 5731 Steel Bars, Forgings, and Rings, Corrosion and Heat Resistant, 15Cr - 25.5Ni - 1.2Mo - 2.1Ti - 0.006B - 0.30V, Consumable Electrode Melted, 1800 °F (982 °C) Solution Heat Treated

AMS 5734 Steel Bars, Forgings, and Tubing, Corrosion and Heat Resistant, 15Cr - 25.5Ni - 1.2Mo - 2.1Ti - 0.006B - 0.30V, Consumable Electrode Melted, 1650 °F (899 °C) Solution Heat Treated

- 2.1.2 U.S. Government Publications: Available from Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

QQ-P-35	Passivation Treatments for Corrosion Resistant Steel
MIL-STD-1312	Fasteners, Test Methods
MIL-STD-2073-1	DoD Materiel, Procedures for Development and Application of Packaging Requirements
MS9403	Rivet Solid - Universal Head, AMS 5737
MS9460	Rivet Solid - 100°, Flush Head, AMS 7235

2.2 Definitions:

DEFECTIVE: A unit of product which contains one or more defects.

PRODUCTION INSPECTION LOT: Shall be all finished parts of the same part number, made from a single heat of alloy, heat treated at the same time to the same specified condition, produced as one continuous run, and submitted for vendor's inspection at the same time.

2.3 Unit Symbols:

- ° - degree, angular
- % - percent (1% = 1/100)
- °F - degree Fahrenheit
- °C - degree Celsius
- ksi - kips (1000 pounds) per square inch

3. TECHNICAL REQUIREMENTS:

3.1 Material:

The rivets shall be made from AMS 5731 or AMS 5734 heading stock or bar and wire.

3.2 Design:

Unless otherwise specified on the part drawing, rivets furnished to this specification shall conform to the design, dimensions, and other requirements specified on MS9403 and MS9460 for solid rivets.

3.3 Fabrication:

Cold headed, unless purchaser permits forming heads by machining from bar or wire.

- 3.3.1 Condition: Rivets which have been cold headed shall be solution heat treated as in 3.4.1; all rivets shall be partially precipitation heat treated as in 3.4.2.