

Sleeve, Bite Type, 24° Cone Flareless Fitting

RATIONALE

AS4444/1 has been reaffirmed to comply with the SAE five-year review policy.

1. SCOPE:

1.1 Scope:

This SAE Aerospace Standard (AS) establishes the requirements for bite type sleeves for use with 24° cone flareless fluid connection fittings per AS4444.

1.2 Classification:

Sleeves shall be furnished in the types and styles designated by the applicable AS, MS, NAS, and other engineering standard drawings. This document includes the same requirements for bite type sleeves for use with flareless fittings that appear in MIL-F-18280 except for updated materials and process specifications and industry coordinated general improvements. It is intended to serve as a procurement specification for the fittings described herein and in Section 6.

2. REFERENCES:

2.1 Applicable Documents:

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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

AS4444 Fittings, 24° Cone Flareless, Fluid Connection, 4000 psi

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on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS4444/1>**

2.1.2 U.S. Government Publications: Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

QQ-P-35 Passivation Treatments for Corrosion-Resistant Steel
 QQ-S-763 Steel, Bars, Wire, Shapes and Forgings, Corrosion Resisting
 MIL-F-18280 Fittings, Flareless Tube, Fluid Connection

2.1.3 National Aerospace Standards Publications: Available from Aerospace Association of America, 1725 DeSales Street, N.W., Washington, DC 20036.

NAS1095 Flareless Fitting Connections Fabrication and Assembly

2.1.4 ASTM Publications: Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM A 108 Steel Bars, Carbon, Cold-finished, Standard Quality
 ASTM A 576 Steel Bars, Carbon, Hot-wrought, Special Quality

3. TECHNICAL REQUIREMENTS:

3.1 Material:

Fittings shall be fabricated of materials listed in Table 1 and in compliance with requirements in this document or as specified on the applicable part standard drawing.

TABLE 1 - Materials

Material	Form	Specification	Alloy & Temper	Material Code
Carbon steel	Bars, rods	ASTM A 108	1213, 12L14, or 1215	None
		ASTM A 576	1213	None
Corrosion resistant steel	Bars, rods	QQ-S-763	Class 316	W

3.1.1 Heat Treatment: Bite type sleeves shall be heat treated by case hardening or nitriding to metallurgical properties capable of meeting the performance requirements of 3.5. The acceptability of the heat treatment shall be by functional test only in accordance with 3.6. See Section 6 for historical detail metallurgical requirements.

3.2 Design and Fabrication:

The design and fabrication of the fittings shall be in accordance with the applicable drawings. The bite type sleeves when assembled to tubing are intended to mate with the 24° cone flareless fitting end of AS4444.