



AEROSPACE STANDARD

AS4875/1

Issued 1995-05
Reaffirmed 2015-07

Fittings, Straight Thread Boss or Flanged to 37° Flared, Fluid Connection

RATIONALE

AS4875/1 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 fluid fittings that combine both straight thread boss or flanged connections and 37° flared connections for use in all types of fluid systems.

1.2 Classification:

Fittings shall be furnished in the types and styles designated by the applicable AN and other engineering standard drawings. This specification is the same as MIL-F-5509 as applicable to straight thread boss or flanged to 37° flared tube fittings 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 specification 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 specification and references cited herein, the text of this specification takes precedence. Nothing in this specification, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS4875/1>

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

AS4395	Fitting End - Flared Tube Connection, Design Standard
AS4396	Fitting End - Bulkhead Flared Tube Connection, Design Standard
AS4841	Fittings, 37° Flared, Fluid Connection
AS4875	Fittings, Straight Thread Boss and Flanged, Fluid Connection

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

MS21947	Fitting End - Bolt Cluster Fitting Single Port Through-Flare
MS33649	Bosses, Fluid Connection Internal Straight Thread
MS33656	Fitting End, Standard Dimensions for Flared Tube Connection and Gasket Seal
MS33657	Fitting End, Standard Dimensions for Bulkhead Flared Tube Connection

3. TECHNICAL REQUIREMENTS:

3.1 Material:

See AS4875.

3.2 Design and Fabrication:

The design and fabrication of the fittings shall be in accordance with the applicable drawings. The straight thread boss connections and the 37° cone ends of fittings shall be in accordance with MS21947, MS33649, MS33656, MS33657, AS4395, or AS4396 as applicable. The 37° cone flared fitting ends shall meet the requirements of AS4841 as applicable.

3.3 Finish:

See AS4875.

3.4 Identification of Product:

See AS4875.

3.5 Workmanship:

See AS4875 for the straight thread boss and flanged ends and fitting bodies and AS4841 for the 37° flared ends.

4. QUALITY ASSURANCE PROVISIONS:

See AS4875 for the straight thread boss and flanged ends and fitting bodies and AS4841 for the 37° flared ends.

5. PREPARATION FOR DELIVERY:

See AS4875.

6. NOTES:

6.1 Intended Use:

See AS4875.

6.2 Assembly:

See AS4875 for straight thread boss and flanged ends. For 37° cone fitting ends see 6.1 of AS4841.

6.3 Superseding Information:

This specification is intended to be suitable for designation as a procurement specification for straight thread boss and flanged fittings that also have a 37° cone flared fitting end. The specification is intended to be a replacement as a primary procurement specification for the following fittings that have MIL-F-5509 designated as a procurement specification:

AN774	Bolt - Flared Tube Fittings End Universal
AN776	Connector, Multiple Fluid Pressure Line, 90°
AN777	Connector, Multiple Fluid Pressure Line, 75°
AN778	Connector, Multiple Fluid Pressure Line, 45°
AN779	Connector, Multiple Fluid Pressure, Straight
AS933	Adapter - Flared Tube to Boss
AS934	Adapter - Reducer/Expander, Flared Tube to Boss
AS1031	Reducer Tee - Bulkhead on Run, Internally Threaded Side Port, Flared Tube
AS1032	Tee, Reducer - Bulkhead and Internally Threaded Port on Run, Flared Tube
MS20760	Adapter, Straight, Flange to Tube
MS21950	Bolt - Cluster Fitting Single Port Through - Flare
MS21951	Bolt - Cluster Fitting Double Port - Flare
MS21953	Body - Cluster Fitting One Way - Flare
MS21954	Body - Cluster Fitting Two Way 90° - Flare
MS21955	Body - Cluster Fitting Two Way 180° - Flare
MS21956	Body - Cluster Fitting Three Way - Flare
MS24387	Bolt, Fluid Passage, Precision Type
MS24388	Tee, Flared Tube, Internal Thread on Side, Precision Type
MS24389	Tee, Tube, Internal Thread on Run, Precision Type
MS24398	Adapter, Straight, Tube to Boss Precision Type
MS24487	Nipple, Tube, 37° to 45° Seat