

AEROSPACE MATERIAL SPECIFICATION



AMS 2616E

Issued OCT 1940
Revised OCT 1993
Cancelled NOV 2001

Superseded by AMS 2615
Superseding AMS 2616D

Pressure Testing, Hydraulic
200 psi

CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of November 2001, and has been superseded by AMS 2615 using a test pressure of 200 psi $\pm$ 10. The requirements of the latest issue of AMS 2615 using a test pressure of 200 psi $\pm$ 10 shall be fulfilled whenever reference is made to the cancelled AMS 2616. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications noting that it is superseded by AMS 2615 using a test pressure of 200 psi $\pm$ 10.

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1. SCOPE:

This specification provides requirements and procedures for hydraulic-pressure leak testing of parts.

1.1 MAM 2616 is the metric equivalent of this AMS.

1.2 Safety - Hazardous Materials:

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

2. APPLICABLE DOCUMENTS:

Not applicable.

3. TECHNICAL REQUIREMENTS:

3.1 Equipment:

- 3.1.1 Fixtures: Test fixtures shall not seal off areas of possible leakage or create excessive stresses on parts other than those induced by the pressure itself or by fittings acceptable to purchaser.
- 3.1.2 Gaskets: Suitable gasket material shall be used with plugs or blanking plates to prevent damage to finished surfaces. Flanges or fittings designed for use with specific O-rings or gaskets shall use those for test. Formed in place gaskets that could mask dimensional or surface flaws shall not be used except for raw castings.
- 3.1.3 Valves: Bleeder valves shall be provided to release entrapped air.
- 3.1.4 Gauges: Pressure gauges shall have sufficient dial divisions to permit monitoring of specified pressure with maximum gauge capacity not more than five times test pressure and readability or marked increments not less than 5% of test pressure. Gauges shall have been calibrated within one year of use, using either primary standards or standards traceable to National Institute of Standards and Technology (NIST).
- 3.1.5 Safety Tank or Screen: A suitable tank or screen shall be provided to protect the operator in case of failure of a part. (See 8.2)
- 3.1.6 Drying Oven: A circulating-air oven is required for drying parts subject to corrosion.