

AEROSPACE MATERIAL SPECIFICATION



AMS 2602E

Issued JAN 1942
Revised JUL 1991
Cancelled FEB 2004

Superseding AMS 2602D

Pressure Testing
25 psi

CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of February, 2004, and has been superseded by AMS 2610 using a test pressure of 25 to 35 psi. The requirements of the latest issue of AMS 2610 using a test pressure of 25 to 35 psi shall be fulfilled whenever reference is made to the cancelled AMS 2602. 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will remain listed in the Numerical Section of the Index of Aerospace Material Specifications noting that it is superseded by AMS 2610 using a test pressure of 25 to 35 psi.

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1. SCOPE:

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

1.1 MAM 2602 is the metric version of this AMS.

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 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 dial divisions not more than 1 psi apart; gauges shall have been calibrated, within one year of use, using either primary standards or standards traceable to the National Institute of Standards.

3.1.5 Test Media Source: The source of test media shall provide the required pressure and shall be equipped with a pressure regulator to control the pressure.

3.1.6 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).

3.1.7 Drying Oven: A circulating-air oven shall be provided for drying parts subject to corrosion.

3.2 Test Media:

Shall be compressed air, nitrogen, or inert gas for applying internal pressure to the part. In addition, a tank of tap water or other transparent liquid shall be provided for parts tested by immersion; liquid soap or commercial leak detector solution shall be used on parts not immersed during test.