

AEROSPACE MATERIAL SPECIFICATION



MAM 4911B

Issued APR 1998
Revised JUN 1994
Cancelled MAR 2003

Superseding MAM 4911A

Titanium Alloy Sheet, Strip, and Plate
6Al - 4V
Annealed

UNS R56400

CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of March, 2003. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications.

AMS 4911 covers the same material.

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1. SCOPE:

1.1 Form:

This specification covers a titanium alloy in the form of sheet, strip, and plate procured in metric units.

1.1.1 AMS 4911 is the inch/pound version of this MAM.

1.2 Application:

These products have been used typically for parts requiring strength up to 400 °C, but usage is not limited to such applications.

1.2.1 Certain processing procedures and service conditions may cause these products to become subject to stress-corrosion cracking; ARP982 recommends practices to minimize such conditions.

2. 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.

2.1 SAE Publications:

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

MAM 2242 Tolerances, Metric, Corrosion and Heat Resistant Steel, Iron Alloy, Titanium, and Titanium Alloy Sheet, Strip, and Plate
AMS 2249 Chemical Check Analysis Limits, Titanium and Titanium Alloys
AMS 2631 Ultrasonic Inspection, Titanium and Titanium Alloy Bar and Billet
AMS 2750 Pyrometry
AMS 2809 Titanium and Titanium Alloy Wrought Products

ARP982 Minimizing Stress-Corrosion Cracking in Wrought Titanium Alloy Products

2.2 ASTM Publications:

Available from ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

ASTM E 8M Tension Testing of Metallic Materials (Metric)
ASTM E 120 Chemical Analysis of Titanium and Titanium Alloys
ASTM E 290 Semi-Guided Bend Test for Ductility of Metallic Materials
ASTM E 384 Microhardness of Materials
ASTM E 1409 Determination of Oxygen in Titanium and Titanium Alloys by the Inert Gas Fusion Technique
ASTM E 1447 Determination of Hydrogen in Titanium and Titanium Alloys by the Inert Gas Fusion Thermal Conductivity Method

2.3 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

MIL-STD-163 Steel Mill Products, Preparation for Shipment and Storage

3. TECHNICAL REQUIREMENTS:

3.1 Composition:

(R)

Shall conform to the percentages by weight shown in Table 1, determined by analytical methods in accordance with ASTM E 120, ASTM E 1409, and ASTM E 1447, by spectrochemical methods, or by other analytical methods acceptable to purchaser.