



AEROSPACE MATERIAL SPECIFICATION

AMS2368™**REV. E**Issued 1995-04
Revised 2022-07

Superseding AMS2368D

Sampling and Testing of Wrought Titanium Raw Material
Except Forgings and Forging Stock

RATIONALE

AMS2368E results from a Five-Year Review and update of this specification with revisions to fracture toughness to add K_{IC} invalidity (3.2.5.1), low temperature testing (3.2.12.3), resampling and retesting (3.3), and applicable documents (Section 2, 3.2.8).

1. SCOPE

1.1 Purpose

This specification provides a standard set of procedures for sampling and testing to meet the requirements of material specifications for wrought titanium and titanium alloy products, except forgings and forging stock. It is applicable to the extent specified in a material specification.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS2249	Chemical Check Analysis Limits, Titanium and Titanium Alloys
AMS2631	Ultrasonic Inspection, Titanium and Titanium Alloy Bar, Billet, and Plate
AMS2632	Inspection, Ultrasonic, of Thin Materials 0.50 Inch (12.7 mm) and Under in Cross-Sectional Thickness
AMS2634	Ultrasonic Inspection, Thin Wall Metal Tubing
AMS2801	Heat Treatment of Titanium Alloy Parts
AMS-H-81200	Heat Treatment of Titanium and Titanium Alloys
AS7766	Terms Used in Aerospace Metals Specifications

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Full document details: [SAE AMS2368E](http://www.sae.org/standards/content/AMS2368E)

For more information on this standard, visit
<https://www.sae.org/standards/content/AMS2368E/>

Documents

Document Sharing Hub

2.2 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM E8/E8M	Tension Testing of Metallic Materials
ASTM E10	Brinell Hardness of Metallic Materials
ASTM E18	Rockwell Hardness of Metallic Materials
ASTM E21	Elevated Temperature Tension Tests for Metallic Materials
ASTM E112	Determining Average Grain Size
ASTM E139	Conducting Creep, Creep-Rupture, and Stress-Rupture Tests of Metallic Materials
ASTM E290	Bend Testing of Material for Ductility
ASTM E292	Conducting Time-for-Rupture Notch Tension Tests of Materials
ASTM E384	Microindentation Hardness of Materials
ASTM E399	Linear-Elastic Plane-Strain Fracture Toughness of Metallic Materials
ASTM E539	Analysis of Titanium Alloys by Wavelength Dispersive X-Ray Fluorescence Spectrometry
ASTM E1304	Plane-Strain (Chevron Notch) Fracture Toughness of Metallic Materials
ASTM E1409	Determination of Oxygen and Nitrogen in Titanium and Titanium Alloys by Inert Gas Fusion
ASTM E1447	Determination of Hydrogen in Titanium and Titanium Alloys by Inert Gas Fusion Thermal Conductivity/Infrared Detection Method
ASTM E1941	Determination of Carbon in Refractory and Reactive Metals and Their Alloys by Combustion Analysis
ASTM E2371	Analysis of Titanium and Titanium Alloys by Direct Current Plasma and Inductively Coupled Plasma Atomic Emission Spectrometry (Performance-Based Test Methodology)
ASTM E2994	Analysis of Titanium and Titanium Alloys by Spark Atomic Emission Spectrometry and Glow Discharge Atomic Emission Spectrometry (Performance-Based Method)

2.3 Definitions

Terms used in AMS are defined in AS7766.

3. TECHNICAL REQUIREMENTS

3.1 General

3.1.1 Conformance

The producer shall be responsible for furnishing products that conform to all requirements of the material specification. Sampling and testing for any requirements not covered herein or in the material specification shall be optional, unless otherwise specified by purchaser.