



AEROSPACE MATERIAL SPECIFICATION

AMS5862™/H1025

Issued

2026-02

Steel, Corrosion-Resistant, Sheet, Strip, and Plate,
15Cr - 4.5Ni - 0.30Cb (Nb) - 3.5Cu (15-5PH®),
Consumable Electrode Remelted, Premium Aircraft Quality,
Solution Heat Treated and Precipitation Hardened (H1025)
(Composition similar to UNS S15500)

RATIONALE

AMS5862/H1025 is a new specification for the purchase of corrosion-resistant steel sheet, strip, and plate.

1. SCOPE

1.1 Form

This specification covers a corrosion-resistant steel product in the solution and precipitation heat-treated (H1025) condition, 4 inches (102 mm) and under in nominal thickness.

1.1.1 The aged product may be supplied directly by a producer or by another entity performing the functions of a producer as defined in AS6279. The latter can be accomplished by precipitation heat treatment of solution-treated material previously certified to AMS5862. The entity assuming responsibility for the aging operation is designated the producer of AMS5862/H1025.

1.2 Application

These products have been used typically for parts requiring corrosion resistance and high strength up to 600°F (316 °C), but usage is not limited to such applications (see 8.1).

1.3 Classification

Melting practice classification shall be in accordance with AMS5862.

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.

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SAE WEB ADDRESS:

Full document details: SAE AMS5862_H1025

For more information on this standard, visit
<https://www.sae.org/standards/content/AMS5862/H1025/>

Documents

Standard, visit Sharing Hub

2.1 SAE Publications

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

AMS2242	Tolerances, Corrosion- and Heat Resistant Steel, Iron Alloy, Titanium, and Titanium Alloy Sheet, Strip, and Plate
AMS2759/3	Heat Treatment, Precipitation-Hardening Corrosion-Resistant, Maraging, and Secondary Hardening Steel Parts
AMS2759/11	Stress Relief of Steel Parts
AMS2761	Heat Treatment of Steel Raw Materials
AMS5862	Steel, Corrosion-Resistant, Sheet, Strip, and Plate, 15Cr - 4.5Ni - 0.30Cb (Nb) - 3.5Cu, Consumable Electrode Remelted, Solution Heat Treated, Precipitation-Hardenable
AS6279	Standard Practice for Production, Distribution, and Procurement of Metal Stock
AS7766	Terms Used in Aerospace Metals Specifications

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 A370 Mechanical Testing of Steel Products

2.3 Definitions

Terms used in AMS are defined in AS7766.

3. TECHNICAL REQUIREMENTS

3.1 Composition

Composition shall be in accordance with AMS5862.

3.2 Melting Practice

Melting practice shall be in accordance with AMS5862.

3.3 Condition

Product shall be in accordance with AMS5862 and the following:

3.3.1 The product shall be supplied in the precipitation-hardened (H1025) heat-treat condition.

3.4 Heat Treatment

Heat treatment shall be in accordance with AMS5862 and the following:

3.4.1 Precipitation Heat Treatment

3.4.1.1 Precipitation heat treatment shall be in accordance with the requirements applicable to either AMS2761 or AMS2759/3 at the producer's option, except acceptance testing and criteria shall be as specified in 3.5.1.