AEROSPACE MATERIAL SPECIFICATION

AMS5643™/H925	REV. A

Issued 2022-01
Stabilized 2022-09

Superseding AMS5643/H925

Steel, Corrosion-Resistant, Bars, Wire, Forgings, Mechanical Tubing, and Rings
16Cr - 4.0Ni - 0.30Cb (Nb) - 4.0Cu
Solution and Precipitation Heat Treated (H925)
(Composition similar to UNS S17400)

RATIONALE

AMS5643/H925A has been declared "STABILIZED" by AMS Committee F. This document will no longer be updated and may no longer represent standard industry practice. This document was stabilized because the condition represented is susceptible to stress corrosion cracking in certain environments.

NOTE: Previously, this document was issued. The last technical update of this document occurred in January, 2022. Users of this document should refer to the cognizant engineering organization for disposition of any issues with reports/certifications to this specification, including exceptions listed on the certification. In many cases, the purchaser may represent a sub-tier supplier and not the cognizant engineering organization.

STABILIZED NOTICE

AMS5643/H925A has been declared “STABILIZED” by SAE AMS Committee F Corrosion Heat Resistant Alloys Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: **http://www.sae.org**

For more information on this standard, visit
https://www.sae.org/standards/content/AMS5643/H925A/

1. SCOPE

1.1 Form

This specification covers a corrosion-resistant steel product 8 inches (203 mm) and under in nominal diameter, thickness or for hexagons, least distance between parallel sides, and having a maximum cross-sectional area of 64 square inches (413 cm^2) in the solution and precipitation heat treated (H925) condition.

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 AMS5643. The entity assuming responsibility for the aging operation is designated the producer of AMS5643/H925A.

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 8.2).

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.

AMS2241 Tolerances, Corrosion and Heat-Resistant Steel, Iron Alloy, Titanium, and Titanium Alloy Bars and Wire

AMS2759/3 Heat Treatment, Precipitation-Hardening Corrosion-Resistant, Maraging, and Secondary Hardening Steel Parts