



AEROSPACE MATERIAL SPECIFICATION

AMS5659™/H1075

Issued 2022-09

Steel, Corrosion-Resistant, Bars, Wire, Forgings, Rings, and Extrusions
15Cr - 4.5Ni - 0.30Cb (Nb) - 3.5Cu
Solution and Precipitation Heat Treated (H1075)
(Composition similar to UNS S15500)

RATIONALE

AMS5659/H1075 is a new specification for the purchase of corrosion-resistant steel product in the solution and precipitation heat treated (H1075) condition.

1. SCOPE

1.1 Form

This specification covers a corrosion-resistant steel product 12 inches (305 mm) and under in nominal diameter, thickness or for hexagons, least distance between parallel sides, and having a maximum cross-sectional area of 144 square inches (930 cm²) in the solution and precipitation heat treated (H1075) 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 AMS5659. The entity assuming responsibility for the aging operation is designated the producer of AMS5659/H1075.

1.2 Application

These products have been used typically for parts requiring corrosion resistance and high strength up to 600 °F (316 °C) with good ductility and strength in the transverse direction in large section sizes, but usage is not limited to such applications (see 8.1).

1.3 Classification

Melting practice classification shall be in accordance with AMS5659.

2. APPLICABLE DOCUMENTS

The issue of the following documents is 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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