

**AEROSPACE
MATERIAL
SPECIFICATION**



AMS-S-5000A

Issued MAR 1999
Cancelled MAR 2007

Superseded by AMS 6415 and
AMS 6484

Steel, Chrome-Nickel-Molybdenum (E4340) Bars and Reforging Stock

RATIONALE

AMS-S-5000A was issued to cancel and supersede AMS-S-5000 with current, technically equivalent specifications.

CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of March 2007 and has been superseded by the applicable AMS specifications listed below. The requirements of the latest issue of the appropriate AMS specification listed below shall be fulfilled whenever reference is made to the cancelled AMS-S-5000. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications, noting that it has been superseded by the applicable AMS.

AMS 6415 Steel, Bars, Forgings, and Tubing 0.80Cr 1.8Ni 0.25Mo (0.38 - 0.43C) (SAE 4340)

AMS 6484 Steel, Bars, Forgings, and Tubing 0.80Cr 1.8Ni 0.25Mo (0.38 - 0.43C) (SAE 4340)
Normalized and Tempered

Either AMS specification is suitable for reforging stock as that product condition is defined "As ordered by the forging manufacturer" in both specifications.

Cancelled specifications are available from SAE.

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NOTICE

This document has been taken directly from U.S. Military Specification MIL-S-5000E and contains only minor editorial and format changes required to bring it into conformance with the publishing requirements of SAE technical standards. The initial release of this document is intended to replace MIL-S-5000E. Any part numbers established by the original specification remain unchanged.

The original Military Specification was adopted as an SAE standard under the provisions of the SAE Technical Standards Board (TSB) Rules and Regulations (TSB 001) pertaining to accelerated adoption of government specifications and standards. TSB rules provide for (a) the publication of portions of unrevised government specifications and standards without consensus voting at the SAE Committee level, and (b) the use of the existing government specification or standard format.

Under Department of Defense policies and procedures, any qualification requirements and associated qualified products lists are mandatory for DOD contracts. Any requirement relating to qualified products lists (QPL's) has not been adopted by SAE and is not part of this SAE technical report.

1. SCOPE:

1.1 Scope:

This specification covers electric furnace steel bars and reforging stock of aircraft quality.

1.2 Classification:

1.2.1 Physical condition: Bars shall be furnished in one of the following physical conditions, as specified (see 6.2):

- (A) As forged
- (B) As rolled
- (C) Annealed
- (D) Normalized
- (E) Normalized and tempered
- (F) Hardened and tempered, 130,000 psi minimum yield strength

1.2.2 Surface conditions: Bars shall be furnished in one of the following conditions, as specified (see 6.2):

- (1) Black, as forged or rolled
- (2) Pickled or blast cleaned
- (3) Rough turned
- (4) Cold drawn
- (5) Turned, ground, and polished
- (6) Turned and polished

1.3 Sizes and shapes:

Bars and reforging stock shall be furnished in the sizes and shapes specified (see 6.2).

2. APPLICABLE DOCUMENTS:

The following publications, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

2.1 SAE Publications:

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

AMS 2301 Aircraft Quality Steel Cleanliness, Magnetic Particle Inspection Procedure