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SAE-AMS-S-5000, "STEEL, CHROME-NICKEL-MOLYBDENUM (E4340) BARS AND REFORGING STOCK", was adopted on 11-AUG-00 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Commander, Naval Air Warfare Center, Aircraft Division, Code 414100B120-3, Highway 547, Lakehurst, NJ 08733-5100. Copies of this document may be purchased from the Society of Automotive Engineers 400 Commonwealth Drive Warrendale, Pennsylvania, United States, 15096-0001. <u>http://www.sae.org/</u>

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Army - AT, EA, MI Air Force - 99

FSC 9510

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SAE AMS-S-5000

Issued

MAR 1999

Submitted for recognition as an American National Standard

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

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.

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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

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1.2.2 Surface conditions: Bars shall be furnished in one of the following conditions, as specified (see 6.2):		
 Black, as forged or rolled Pickled or blast cleaned Rough turned Cold drawn Turned, ground, and polished 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 Ai	rcraft Quality Steel Cleanliness, Magnetic Particle In	spection Procedure
2.2 U.S. Government Publications:		
Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.		
MIL-I-6868 MIL-I-8950	Inspection Process, Magnetic Particle Inspection, Ultrasonic, Wrought Metals, Process fo	or
FED-STD-151 FED-STD-183	Metals; Test Methods Continuous Identification Marking of Iron and Stee	I Products
MIL-STD-163	Steel Mill Products, Preparation for Shipment and	Storage

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