

AEROSPACE MATERIAL SPECIFICATION



AMS-S-8559B

Issued	1998-11
Noncurrent	2002-07
Cancelled	2007-11

Superseding AMS-S-8559A

Steel Bars, Carbon, AISI (1095), Aircraft Quality

RATIONALE

AMS-S-8559A has been designated cancelled as similar requirements are provided by ASTM A 686, Type W1-9.

CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of November, 2007. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications indicating that it has been "CANCELLED".

Cancelled specifications are available from SAE.

Similar but not necessarily identical products are covered in the following specification. However, this listing is provided for information only and does not constitute authority to substitute these specifications for the "CANCELLED" specification.

ASTM A686 Standard Specification for Tool Steel, Carbon (Type W1-9)

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1. SCOPE:

1.1 Scope:

This specification covers carbon steel (1095) bars.

1.2 Classification:

Bars shall be furnished in one grade only, and in one of the following physical and surface conditions, as specified (see 6.2):

Physical conditions:

- a. As forged
- b. As rolled
- c. Spheroidized

Surface conditions:

- 1. Black as forged or rolled
- 2. Pickled or blast cleaned
- 3. Rough turned
- 4. Cold rolled or cold drawn
- 5. Surface ground

- 1.2.1 Unless otherwise specified, bars 1 inch and less in diameter or thickness shall be furnished in condition (C) (4), and bars over 1 inch in diameter or thickness shall be furnished in condition (C) (2) (see 6.2).

2. APPLICABLE DOCUMENTS:

The following publications, of the issues in effect on the 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

2.2 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

P-D-680	Dry Cleaning Solvent
PPP-B-621	Boxes, Wood, Nailed and Lock-Corner
PPP-C-650	Crates, Wood, Open and Covered
MIL-L-7870	Lubricating Oil, General Purpose, Low Temperature
MIL-C-11796	Corrosion Preventive Compound, Petrolatum, Hot Application
MIL-C-16173	Corrosion Preventive Compound, Solvent Cutback, Cold Application
FED-STD- 48	Tolerances for Steel and Iron Wrought Products
FED-STD-151	Metals; Test Methods
MIL-STD-163	Steel Mill Products, Preparation for Shipment and Storage
FED-STD-183	Continuous Identification Marking of Iron and Steel Products

2.3 ASTM Publications:

Available from ASTM, 100 Barr Harbor, West Conshohocken, PA 19428-2959.

ASTM E 381-68 Rating Macroetched Steel

3. REQUIREMENTS:

3.1 Material:

The steel shall be of aircraft quality. The materials shall be magnetically inspected in accordance with the procedures of AMS 2301, and shall not exceed the size and frequency rating limits indicated in the paragraph entitled "Disposition" of AMS 2301 (see 4.8).

3.2 Manufacturing process:

The steel shall be manufactured using an acceptable process for aircraft quality, unless a specific process is specified in the contract or order.

3.2.1 Sufficient discard shall be taken from each ingot to ensure freedom from piping and undue segregation.