



<b>AEROSPACE MATERIAL SPECIFICATION</b>	<b>AMS-F-7190™</b>	<b>REV. B</b>
	Issued 1999-01 Noncurrent 2007-03 Reaf. Noncur. 2011-11 Stabilized 2016-08  Superseding AMS-F-7190A	
Forging, Steel, For Aircraft/Aerospace Equipment and Special Ordnance Applications		

#### RATIONALE

AMS-F-7190B has been stabilized as similar requirements are available.

#### STABILIZED NOTICE

AMS7190B has been declared "STABILIZED" by AMS E Carbon and Low Alloy Steels Committee. This document will no longer be updated and may no longer represent standard industry practice. This document was stabilized because similar requirements are available. Previously this document was reaffirmed noncurrent. The last technical update of this document occurred in January 1999. 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.

NOTE: In many cases, the purchaser may represent a sub tier supplier and not the cognizant engineering organization.

AMS Committee E recommends that the following similar, but not identical specification may be considered for future procurement. This listing does not constitute authority to substitute this specification for the "STABILIZED" specification.

AMS6400 Forgings, Steel for Aircraft/Aerospace Equipment

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2016 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

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  
http://www.sae.org

SAE WEB ADDRESS:

**SAE values your input. To provide feedback  
on this Technical Report, please visit  
<http://www.sae.org/technical/standards/AMSF7190B>**

## NOTICE

This document has been taken directly from U.S. Military Specification MIL-F-7190B, Amendment 1, 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-F-7190B, Amendment 1. 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 document.

## 1. SCOPE:

### 1.1 Scope:

This specification covers steel forgings suitable for use in the construction of aircraft/aerospace equipment, special ordnance, and related accessories.

### 1.2 Classification:

Steel forgings shall be furnished in the following grades. If grade is not specified, then Grade A is required (see Table I and 6.2.1).

Grade A - Testing and inspection  
Grade B - Testing and inspection  
Grade C - Testing and inspection

## 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 U.S. Government Publications:

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

MIL-H-6875 Heat Treatment of steels (Aircraft Practice), Process for

FED-STD-151 Metals, Test Methods

MIL-STD-163 Steel Mill Products, Preparation for Shipment and Storage

MIL-STD-183 Continuous Identification Marking of Iron and Steel Products

MIL-STD-1949 Inspection Process, Magnetic Particle

MIL-STD-6866 Inspection, Penetrant Method of

## 3. REQUIREMENTS:

### 3.1 Materials:

Forgings shall be produced from cast ingots or from a wrought stock conforming to the requirements of the applicable material specification and applicable drawing, as specified by the contract or purchase order. Materials shall be worked prior to and during the forging operation to produce a wrought metallurgical structure.

#### 3.1.1 Cleanliness: Cleanliness rating requirements shall be as required by the material specification or as agreed upon between the purchaser and contractor.