



AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
485 LEXINGTON AVENUE, NEW YORK, N. Y. 10017

AMS 5069A

Superseding AMS 5069

Issued 1-15-59

Revised 5-1-68

STEEL BARS, FORGINGS, AND TUBING (0.15-0.20C) (SAE 1018)

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. FORM: Bars, forgings, mechanical tubing, and forging stock.
3. APPLICATION: Primarily for miscellaneous parts, such as bushings, requiring no particular strength or hardness other than that inherent in low carbon steel of this type.
4. COMPOSITION:

	min	max
Carbon	0.15 - 0.20	
Manganese	0.60 - 0.90	
Silicon	0.15 - 0.30	
Phosphorus	--	0.040
Sulfur	--	0.050

- 4.1 Check Analysis: Composition variations shall meet the requirements of the latest issue of AMS 2259, paragraph titled, "Carbon Steels, Bars, Forgings, and Forging Stock."
5. CONDITION: Unless otherwise ordered, the product shall be supplied in the following condition:
 - 5.1 Bars: Hot finished having hardness not higher than Brinell 229 or equivalent, except that bars ordered cold finished may have hardness as high as Brinell 241 or equivalent.
 - 5.2 Forgings: As ordered.
 - 5.3 Mechanical Tubing: Cold finished having hardness not higher than Brinell 241 or equivalent.
 - 5.4 Forging Stock: As ordered by the forging manufacturer.
6. QUALITY: Material shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external imperfections detrimental to fabrication or to performance of parts.
7. TOLERANCES: Unless otherwise specified, tolerances shall conform to all applicable requirements of the following:
 - 7.1 Bars: The latest issue of AMS 2231.
 - 7.2 Mechanical Tubing: The latest issue of AMS 2253.