

AERONAUTICAL MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

AMS 5069

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Revised

STEEL (0.15 - 0.20C) (SAE 1018)

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. FORMS: Bars, billets, forgings, forging stock, or mechanical tubing.
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:

		Check Analysis	
		Under	Min or Over Max
Carbon	0.15 - 0.20	0.02	0.02
Manganese	0.60 - 0.90	0.03	0.03
Silicon	0.15 - 0.30	0.02	0.02
Phosphorus	0.040 max	--	0.008
Sulfur	0.050 max	--	0.008

5. CONDITION:
 - 5.1 Bars: In a machinable condition; if ordered cold finished, hardness shall be not higher than Brinell 241 or equivalent.
 - 5.2 Mechanical Tubing: In a machinable condition.
 - 5.3 Forgings: As ordered.
 - 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 the following:
 - 7.1 Bars: The latest issue of AMS 2231 as applicable. Diameter or thickness tolerances for cold finished bars and all hexagons shall conform to Table I, column headed "0.28 and under".
 - 7.2 Mechanical Tubing: The latest issue of AMS 2253 as applicable to Mechanical Type.