



AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 5061B

Superseding AMS 5061A

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STEEL BARS AND WIRE, LOW CARBON

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. FORM: Bars and wire not exceeding 3/4 in. in diameter.
3. APPLICATION: Primarily for manufacture of cold-headed threaded parts.
4. COMPOSITION:

	min	max
Carbon	0.08	0.20
Manganese	0.40	0.80
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: Cold drawn.
6. TECHNICAL REQUIREMENTS:
 - 6.1 Tensile Properties:

Tensile Strength, psi	70,000 min
Elongation, % in 2 in. or 4D	10 min
 - 6.2 Hardness: Surface hardness shall be Rockwell B 80 - 100.
7. QUALITY: The product 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.
8. TOLERANCES: Unless otherwise specified, tolerances shall conform to all applicable requirements of the latest issue of AMS 2231.
9. REPORTS:
 - 9.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report of the results of tests for chemical composition and tensile properties of each lot in the shipment. This report shall include the purchase order number, material specification number and its revision letter, size, and quantity.

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