

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 5061

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Revised

STEEL - LOW CARBON

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

		Check Analysis	
		Under Min	or Over Max
Carbon	0.08 - 0.20	0.01	0.01
Manganese	0.40 - 0.80	0.03	0.03
Phosphorus	0.040 max	—	0.008
Sulfur	0.050 max	—	0.008

5. **CONDITION:** Cold drawn.

6. **TECHNICAL REQUIREMENTS:**

- 6.1 **Physical Properties:** Material shall conform to the following requirements:

Tensile Strength, psi	70,000 min
Elongation, % in 4D	10 min
Hardness, Rockwell	B85-102

7. **QUALITY:** Material shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts.
8. **TOLERANCES:** Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2231 as applicable. Diameter tolerances shall conform to Table I, column headed "Mean of Carbon .30% and less".

9. **REPORTS:**

- 9.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a notarized report of the results of tests for chemical composition of each lot in the shipment. This report shall include the purchase order number, material specification number, size, and quantity.

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