

Issued Dec. 4, 1939
Revised _____
Revised _____

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
29 West 39th Street
New York City

AMS
6360

STEEL TUBING (SEAMLESS) Chromium Molybdenum

1. **ACKNOWLEDGMENT:** A vendor must mention this specification number and its last revision in all quotations and when acknowledging purchase orders.

2. **COMPOSITION:**

Carbon	0.28 - 0.33
Manganese	0.40 - 0.60
Phosphorus	0.040 max
Sulphur	0.050 max
Chromium	0.80 - 1.10
Molybdenum	0.15 - 0.25

3. **GRAIN SIZE:** 5 or finer, A.S.T.M. E19-39T, Method a.

4. **CONDITION:** Normalized to conform to the following minimum physical properties:

Nominal Wall Thickness inches	Tensile Strength lb per sq in.	Yield Strength lb per sq in.	Elongation in 2"	
			Full Tube	Strip
Up to 0.035, incl.	95,000	75,000	10%	5%
0.036 to 0.188,"	95,000	75,000	12%	7%
Over 0.188	90,000	70,000	15%	10%

5. **QUALITY:** (a) This material must be aircraft quality, uniform in temper and must not reveal defects during the fabrication processes.

(b) All tubes shall be straight; the inside and outside surfaces must be clean, smooth, and free from seams, tears, grooves, slivers, pits, scale, rust and any other injurious defects.

6. **TOLERANCE:** (a) The following variations in mean outside diameter are permissible:

Nominal Outside Diameter, inches	Tolerances, inches
less than 1.500	-0.000, + 0.005
1.500 to 3, inclusive	-0.000, + 0.010
over 3"	-0.000, + 0.015

(b) The wall thickness of tubes, 0.5" or larger nominal inside diameter shall not vary more than plus or minus 10% from the thickness specified; smaller sizes may vary plus or minus 15%.

7. **REPORTS:** The manufacturer shall furnish three copies of a certified report of chemical analysis on each heat on each shipment. This report shall include the purchase order number, heat number, material specification number, size and quantity. If parts are supplied, the part number shall also be included.