

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 6360 A

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STEEL TUBING, (SEAMLESS), ROUND Chromium Molybdenum (.27 - .33 Carbon) (Normalized)

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

2. **COMPOSITION:**

Individual Tube Check Analysis Over or Under

Carbon	0.27 - 0.33	0.02 (under only)
Manganese	0.40 - 0.60	0.03
Phosphorus	0.04 max	0.005
Sulphur	0.04 max	0.005
Silicon	0.20 - 0.35	0.02
Chromium	0.80 - 1.10	0.05
Molybdenum	0.15 - 0.25	0.03

3. **GRAIN SIZE:** 5 or finer as determined on the billet, A.S.T.M. E19-39T, method a, unless otherwise ordered.
4. **CONDITION:** Normalized, then stress relieved if cold worked after the normalizing, to conform to the following minimum physical properties, unless otherwise ordered:

Nominal Wall Thickness	Tensile Strength	Yield Strength at 0.2% Set or at		Elongation in 2"	
		Extension Indicated	Extension Under Load	Full Tube	Strip
Inch	lb per sq in.	lb per sq in.	inch in 2"	%	%
Up to 0.035, incl.	95,000	75,000	0.0090	10	5
Over 0.035 to 0.188, incl.	95,000	75,000	0.0090	12	7
Over 0.188	90,000	70,000	0.0087	15	10

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

(b) Finished parts may be subject to magnetic inspection.

(c) The tubing shall have a good workmanlike finish conforming to the best practice for high quality aircraft material. It shall be smooth, clean, and free from heavy scale or oxide, burrs, seams, tears, grooves, laminations, slivers, pits, and other injurious defects. Surface imperfections such as handling marks, straightening marks, light mandrel and die marks, shallow pits, and scale pattern will not be considered as injurious defects, provided the imperfections are removable within the tolerances specified herein for diameter and wall thickness. The removal of surface imperfections is not required.