AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 6365

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Revised

STEEL TUBING, (SEAMLESS), ROUND
Chromium Molybdenum (.32 - .39 Carbon)
(Normalized)

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

2. **COMPOSITION:**

		Individual Tube Check Analysis Over or Under
Carbon	0.32 - 0.39	0.00
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	0.06
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 Extension Indicated		Elongation in 2"	
			Extension Under Load	Full Tube	Strip
Inch	lb per sq in.	lb per sq in.	inch in 2"	%	%
Up to 0.188, incl.	100,000	85,000	0.0097	12	7
Over 0.188	95,000	80,000	0.0093	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.