

AERONAUTICAL MATERIAL SPECIFICATION

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BRASS TUBING, SEAMLESS Light Annealed

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. APPLICATION: Primarily for parts requiring a material of moderate strength and fair ductility.
3. COMPOSITION:

Copper	65.0 - 71.5
Lead	0.8 max
Tin	0.15 max
Iron	0.07 max
Zinc	remainder
4. CONDITION: Fully recrystallized, in light annealed temper. Tubing shall be either bright annealed, or acid cleaned after the final annealing operation.

5. TECHNICAL REQUIREMENTS:

5.1 Tensile Properties:

Tensile Strength, psi	45,000 min
Elongation, % in 2 in.	35 min

- 5.2 Grain Size: Average grain size shall be not larger than 0.035 mm as determined by ASTM E79-49T.

- 5.3 Hardness: Tubing should have hardness of Rockwell Superficial 30T 28-53 or equivalent, but shall not be rejected on the basis of hardness if the tensile property and grain size requirements are met.

- 5.4 Flarability: Tubing shall be capable of being flared without formation of cracks or other visible defects. Specimens for flaring may be cut from any portion of the tube, or an entire tube may be used as a specimen. The end of the specimen to be flared shall be cut square, with the cut end smooth and free from burrs, but not rounded. The specimen shall, at room temperature, be forced axially with steady pressure over a hardened and polished tapered steel pin having a 74-degree included angle, to produce a flare having the permanent expanded OD specified in the following table.

Nominal OD Inch	Permanent Expanded OD Inches
0.750 and under	1.20 x nominal OD
Over 0.750 to 4.00, incl	1.15 x nominal OD

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