

AERONAUTICAL MATERIAL SPECIFICATION

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

AMS 4558A

Issued 5-1-48

Revised 3-1-51

BRASS TUBING, SEAMLESS
66Cu - 32Zn - 1.6Pb
Drawn Temper

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 screw machine parts.

3. COMPOSITION:

Copper	65.0 - 68.0
Lead	1.25 - 2.0
Iron	0.07 max
Zinc	remainder

4. CONDITION: Drawn temper, general purpose.

5. TECHNICAL REQUIREMENTS:

5.1 Tensile Properties:

Tensile Strength, psi	54,000 min
-----------------------	------------

5.2 Hardness: Tubing should have hardness as follows, or equivalent, but shall not be rejected on the basis of hardness if the tensile property requirement is met:

Nominal Wall Thickness, Inch	Hardness, Rockwell
0.012 to 0.020, incl	15T 78 min
Over 0.020 to 0.045, incl	30T 53 min
Over 0.045	B 55 min

5.3 Mercurous Nitrate Test: Test specimens 6 in. in length shall be capable of withstanding, without cracking, immersion for 15 min. in an aqueous solution containing 100 g of mercurous nitrate and 13 ml of nitric acid (sp gr 1.42) per liter of solution, using at least 10 ml of solution per sq in. of test specimen surface area.

6. QUALITY: Tubing shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts.

7. TOLERANCES: Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2223 as applicable. Diameter and wall thickness tolerances shall be as specified below:

7.1 Diameter: Table I, Non-refractory.

7.2 Wall Thickness: Table II.