

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS4710A

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B R A S S W I R E, T I N N E D 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 safety wire.
3. **COMPOSITION:**

(a) Basis Brass Wire.-	Copper	63.0 - 67.5
	Lead	0.10 max
	Iron	0.05 max
	Zinc	remainder

(b) The brass wire shall be uniformly coated with pure tin.
4. **CONDITION:** Cold-drawn and annealed.
5. **TECHNICAL REQUIREMENTS:** Grain Size.- Unless otherwise specified, wire shall have average grain size of 0.035 - 0.070 mm, as determined, on a longitudinal cross section, in accordance with ASTM E2-44T.
6. **QUALITY:** Wire 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 2224 as applicable. Diameter or thickness and width tolerances shall be as specified below:

(a) Rounds	Table I
(b) Hexagons, Octagons	Table II, Non-Refractory
(c) Squares	Table III, Non-Refractory
(d) Rectangles, thickness	Table III, Non-Refractory
(e) Rectangles, width	Table IV, Non-Refractory
8. **REPORTS:**

(a) Unless otherwise specified, the vendor of wire shall furnish with each shipment three copies of a notarized report showing the results of tests to determine conformance to the requirements of this specification, or stating that the chemical composition and grain size of the wire conform to the requirements specified. This report shall include the purchase order number, material specification number, size and quantity.

(b) Unless otherwise specified, the vendor of finished or semi-finished parts shall furnish with each shipment three copies of a notarized report showing the purchase order number, material specification number, contractor or other direct supplier of wire, part number and quantity. When wire for making parts is produced or purchased by the parts vendor, that vendor shall inspect each lot of wire to determine conformance to the requirements of this specification, and shall include in the report a certification that the wire conforms, or shall include copies of laboratory reports showing the results of tests to determine conformance.