

AERONAUTICAL MATERIAL SPECIFICATION

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

AMS4510B

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PHOSPHOR BRONZE STRIP Spring Temper

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

2. FORM: Strip

3. APPLICATION: Primarily for stampings and springs.

4. COMPOSITION:

Copper	93.0 min
Tin	3.5 - 5.8
Phosphorus	0.03 - 0.35
Zinc	0.30 max
Iron	0.10 max
Lead	0.05 max
Antimony	0.01 max
Total Named Elements	99.9 min

5. CONDITION: Spring temper conforming to the following:

	Min	Max
Tensile Strength, psi	91,000	105,000
Hardness Rockwell for thicknesses:		
0.010" to 0.030"	30-T 75	30-T 79
0.030" and over	30-T 77	30-T 81
0.040" and over	B 90 (G69)	B 96 (G75)

6. QUALITY: (a) Material 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. Material in which defects are revealed during fabrication will be subject to rejection.

(b) Material and parts shall be subject to inspection by any method which will reveal harmful defects.

7. TOLERANCES: Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2222 as applicable. Thickness, width and straightness tolerances shall be as specified below:

- (a) Thickness - Table II.
(b) Width - Table III.
(c) Straightness - not required.

8. REPORTS: (a) Unless otherwise specified, the vendor of the product 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 physical properties of the product conform to the requirements specified. This report shall include the purchase order number, material specification number, size and quantity.