

AERONAUTICAL MATERIAL SPECIFICATION

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

AMS4846

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Revised

B R O N Z E C A S T I N G S

1. ACKNOWLEDGMENT: Vendor shall mention this specification number in all quotations and when acknowledging purchase orders.

2. COMPOSITION:

Copper	84.00 - 89.00
Tin	9.00 - 13.50
Zinc	1.00 - 3.00
Lead	1.00 max
Iron	0.65 max
Phosphorus	0.05 max
Total Named Elements	99.50 min

3. HARDNESS: Unless otherwise specified, parts shall have hardness of not less than Rockwell F 70 except when drawing specifies that parts be chill cast or centrifugally cast, in which case parts shall have hardness of not less than Rockwell F 80.

4. QUALITY: (a) Castings shall be of uniform quality and condition, and free from defects detrimental to fabrication or to performance of the parts. If injurious defects are revealed during fabrication, castings shall be subject to rejection. Castings shall have smooth surfaces and shall be well cleaned.

(b) Castings shall be ductile enough to show some bending before rupture when being fracture tested.

(c) Castings and parts made therefrom shall be subject to inspection by any method which, in purchaser's judgment, will reveal defects.

(d) Acceptance standards for black light inspection, radiographic inspection, etc. shall be as agreed between vendor and purchaser.

(e) Castings shall not be repaired by plugging, welding, or other methods without written permission from purchaser.

5. REPORTS: (a) Unless otherwise specified, the vendor of castings shall supply with each shipment three copies of a notarized report showing the results of tests made to determine conformance of the castings to this specification, or stating that hardness and chemical composition of castings conform to the requirements specified. This report shall include the purchase order number, material specification number, part number, quantity and type of casting (centrifugal, chill, sand, etc.).