AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS4845C

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BRONZE CASTINGS
Copper Tin

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

2. COMPOSITION:

Copper	86.0-89.0
Tin	9.0-11.0
Zinc	1.0-3.0
Lead	0.30 max
Iron	0.15 max
Phosphorus	0.05 max
Total Named Elements	99.75 min

3. HARDNESS: (a) Parts made from chill and centrifugal castings shall have hardness not less than Rockwell F80.

(b) Parts made from sand castings shall have hardness not less than Rockwell F70.

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 when broken for the fracture test shall be ductile enough to show bending before rupture.

(c) Castings and parts made therefrom shall be subject to inspection by any method which will reveal defects.

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

(e) Castings shall be of sufficient size to allow for finishing to blueprint requirements, but excessive size or weight will not be permitted.

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

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