AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 4855B

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BRONZE CASTINGS
85Cu - 5Sn - 5Pb - 5Zn

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 parts, such as fittings in fluid conducting lines, where soundness of castings is of prime importance.

3. COMPOSITION:

Copper	83.0 - 86.0
Tin	4.0 - 6.0
Lead	4.0 - 6.0
Zinc	4.0 - 6.0
Nickel	1.0 max
Iron	0.30 max
Phosphorus	0.05 max
Total Named Elements	99.5 min

4. CONDITION: As cast.

5. TECHNICAL REQUIREMENTS:

5.1 Casting: A melt shall be the metal withdrawn from a batch furnace charge of 2000 pounds or less as melted for pouring castings.

5.2 Fracture Test: When castings are broken for fracture test, the fracture shall have uniform color and be substantially free from oxides, blowholes, porosity and other defects. Castings shall be sufficiently ductile to show some bending before rupture.

6. QUALITY:

6.1 Castings shall be uniform in quality and condition, sound, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts. Castings shall have smooth surfaces and shall be well cleaned.

6.2 Inspection standards and procedures shall be as agreed upon by purchaser and vendor.

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

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