AERONAUTICAL MATERIAL SPECIFICATION

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29 West 39th Street
New York City

AMS 4824

Issued 5-1-48
Revised

BEARINGS
Babbitt on Bronze - Steel Backed

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

2. FORM: Bearing shall consist of a steel back on one or both sides of which bronze and then babbitt is cast.

3. COMPOSITION:

3.1 Back: Low carbon steel, unless otherwise specified.

3.2 Bronze (as poured):

Copper	72.00 - 77.00
Lead	22.00 - 26.00
Tin	1.00 - 1.50
Iron	0.35 max
Other Elements, total	0.40 max

3.3 Babbitt (as poured):

Tin	86.00 min
Antimony	6.00 - 7.50
Copper	5.00 - 6.50
Lead	0.35 max
Tellurium	0.15 max
Arsenic	0.10 max
Iron	0.08 max
Bismuth	0.08 max

4. TECHNICAL REQUIREMENTS:

4.1 General:

4.1.1 Bearing metals shall be cast from the best grades of metals, at temperatures and cooling rates which will produce best structures for good bearing properties.

4.1.2 Bronze shall be firmly and continuously bonded to the steel back and shall be free from excessive and injurious lead segregation; babbitt shall be firmly and continuously bonded to the bronze.

4.2 Hardness of Steel Back: Shall be not higher than Rockwell Superficial 15N 75 or equivalent, unless otherwise specified.

5. QUALITY:

5.1 Bearings shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to performance of parts.

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