

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 4815

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Revised

BEARINGS - SILVER Steel Back

1. ACKNOWLEDGMENT: A vendor must mention this specification number in all quotations and when acknowledging purchase orders.
2. FORM: This bearing shall consist of silver electroplated on a steel back.
3. COMPOSITION: (a) The bearing metal shall contain not less than 99.75% silver.
(b) The steel back shall be low carbon, unless composition and hardness are specified otherwise on the drawing.
4. PROCEDURE: (a) After proper cleaning, a flash coating or strike of copper and/or nickel shall be electroplated on the steel back. The silver shall be electroplated directly upon the copper and/or nickel strike.
(b) After silver plating, the bearings shall be heated to 900 - 1000°F for one hour to expose any defects in the silver. Hardened parts which will not stand 900°F shall not be heated to this temperature but shall be treated by an acceptable method approved for each part.
5. HARDNESS: The hardness of the silver shall be 60-85 Rockwell 15 W (Rockwell Superficial Tester with 1/8 inch ball and 15 kg. load or its equivalent.)
6. QUALITY: (a) The silver shall be uniform, dense, fine-grained, and free from blisters or other defects appearing after the heat treatment given in 4 (b). The silver shall be well bonded to the steel.
(b) The steel back shall be free from laps, cracks, seams, and other injurious defects and be machinable after silver has been bonded thereon.
(c) Parts may be subject to black-light inspection.
(d) Parts may be subject to x-ray inspection.
7. REPORTS: The manufacturer shall supply three copies of a notarized report of the chemical composition representing the bearing metal. This report shall include the material specification number, part numbers, quantity of each part, and the purchase order number.
8. IDENTIFICATION: Each finished part shall be identified in accordance with AMS 2800.
9. CORROSION: The manufacturer shall coat all bearings with a corrosion-preventive compound to protect all surfaces from corrosion during shipment or storage. The compound shall be easily removed with gasoline.