

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
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## AMS2412

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Revised

### SILVER PLATING Copper Strike - Low Bake

1. ACKNOWLEDGMENT: Vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. PROCEDURE:
  - (a) Unless otherwise specified, roughness of surfaces to be plated shall not exceed 80 microinches, rms, prior to cleaning.
  - (b) Parts shall be clean when immersed in plating solutions.
  - (c) Electrical contacts shall be made in such manner as will insure that no chemical or immersion deposition will occur.
  - (d) Unless otherwise specified by purchaser, plating of steel parts shall be conducted in the following sequence, by processes approved by purchaser:
    1. Copper strike
    2. Silver strike
    3. Silver plate
  - (e) Unless otherwise specified, all parts shall be heated to 325 - 500°F after plating and held at temperature for not less than 2 hours, unless such heating would lower hardness to below drawing limits, in which case heating shall be at highest practicable temperature which will maintain specified properties. Parts shall be so heated as to prevent harmful oxidation.
3. THICKNESS:
  - (a) When "silver flash" is specified, plate thickness shall be approximately 0.0001 inch.
  - (b) Thickness of plate other than flash shall be as specified on drawing. If machining of plated metal is required, plate thickness as deposited shall be sufficient to allow machining of all areas of plated surfaces to the dimensions specified on the drawing.
4. QUALITY:
  - (a) Silver as plated shall be not less than 99.9% pure, but actual determination of purity shall not be required as a routine inspection procedure; the process of plating shall be controlled to produce this purity.
  - (b) Silver plate which is not subsequently machined shall be smooth, continuous, uniform in color, and free from blisters and other defects detrimental to fabrication or to performance of parts. Selectively plated areas shall be sharply defined.
  - (c) Silver plate which is to be machined shall be sound and free from excessive nodulation or treeing at edges. Finished parts shall be free from visible pits, excessive porosity, and other defects detrimental to fabrication or to performance of parts.