



# AEROSPACE MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

485 Lexington Ave., New York, N. Y. 10017

## AMS 2412D

Superseding AMS 2412C

Issued 8-1-45

Revised 4-15-67

### SILVER PLATING Copper Strike, Low Bake

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **APPLICATION:** Primarily to provide a bearing surface and to prevent galling or seizing of metal surfaces of parts made of materials where a high baking temperature may be detrimental to the properties of the basis material.
3. **PREPARATION:**
  - 3.1 Unless otherwise specified, roughness of surfaces to be plated on parts other than nuts shall not exceed 80 microinches prior to cleaning.
  - 3.2 Parts shall be chemically clean when immersed in plating solutions.
  - 3.3 Electrical contacts shall be made in such manner as will ensure that no chemical or immersion deposition will occur.
4. **PROCEDURE:**
  - 4.1 Unless otherwise specified, plating of parts shall be conducted in the following sequence, except that the copper strike may be omitted in plating copper base alloys; process shall be approved by purchaser.
    1. Copper Strike
    2. Silver Strike
    3. Silver Plate
  - 4.2 Unless otherwise specified, all parts except nuts shall be heated to 300 - 500 F (148.9 - 260 C) after plating and held at heat for not less than 2 hr, unless such heating would lower hardness to below drawing limits or otherwise deleteriously affect the parts, in which case heating shall be at the highest practicable temperature which will maintain specified properties. Parts shall be so heated as to prevent harmful oxidation.
5. **THICKNESS:**
  - 5.1 Where "silver flash" is specified, plate thickness shall be approximately 0.0001 inch.
  - 5.2 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.
6. **QUALITY:**
  - 6.1 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.

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