



AEROSPACE MATERIAL SPECIFICATION

AMS4788™**REV. C**

Issued 1990-07
Reaffirmed 2009-06
Revised 2021-09

Superseding AMS4788B

Silver Alloy Brazing Filler Metal
50Ag - 28Zn - 20Cu - 2.0Ni
1220 to 1305 °F (660 to 707 °C) Solidus-Liquidus Range
(UNS P07505)

RATIONALE

AMS4788C results from a Five-Year Review and update of this specification. Changes have been made to prohibit unauthorized exceptions (3.6, 8.6); update references (2.1, 8.3), reports (4.4.1), identification (5.1.1.1); and allow use of the immediate prior revision of this specification (8.5).

1. SCOPE

1.1 Form

This specification covers a silver alloy in the form of wire, rod, sheet, strip, foil, pig, powder, shot, and chips, and a viscous mixture (paste) of powder in a suitable binder.

1.2 Application

Primarily for joining ferrous metals, particularly austenitic steels and alloys, where high joint strength up to 400 °F (204 °F) is required, and for joining nonferrous metals except those having a base of aluminum or magnesium.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS2224 Tolerances, Copper and Copper Alloy Wire

ARP1917 Clarification of Terms Used in Aerospace Metals Specifications

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Documents
Document Sharing Hub

2.2 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM B214 Sieve Analysis of Granular Metal Powders

2.3 AWS Publications

Available from American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33166-6672, Tel: 1-800-443-9353 or 305-443-9353, www.aws.org.

AWS A5.8M/A5.8 Specification for Filler Metals for Brazing and Braze Welding

3. TECHNICAL REQUIREMENTS

3.1 Composition

Products shall meet the requirements of AWS A5.8 BAg-24.

3.2 Condition

As fabricated unless otherwise specified.

3.2.1 Paste

Paste not containing flux (3.2.1.1) shall be supplied unless paste containing flux (3.2.1.2) is specified.

3.2.1.1 Paste Not Containing Flux

Shall consist of 84 to 90% by weight powder in a suitable binder.

3.2.1.2 Paste Containing Flux

Shall consist of 55 to 80% by weight powder in a suitable binder and flux combination.

3.3 Properties

3.3.1 Paste

3.3.1.1 Paste shall have a shelf life of not less than 6 months from date of manufacture; not more than thorough mixing shall be required to restore paste for use during that time.

3.3.1.2 Paste without flux shall leave no adherent residue when heated in a protective atmosphere to 1000 °F (538 °C) or higher.

3.4 Quality

The product, as received by purchaser, shall be uniform in color, quality, and condition and free from foreign materials and from imperfections detrimental to its working qualities. Wire, rod, sheet, strip, and foil shall be clean, sound, bright, and free from slivers, splitting, ragged edges, damaged ends, and other injurious imperfections. Pig, powder, shot, and chips shall have a metallic luster.