



AEROSPACE MATERIAL SPECIFICATION

AMS4246™**REV. G**

Issued	1986-10
Noncurrent	2008-02
Revised	2026-03

Superseding AMS4246F

Aluminum Alloy, Welding Wire,
7.0Si - 0.52Mg (357)
(Composition similar to UNS A03570)

RATIONALE

AMS4246G results from a Five-Year Review and update of this specification with changes to relocate Definitions (see 2.3) and update Applicable Documents (see Section 2).

1. SCOPE

1.1 Form

This specification covers an aluminum alloy in the form of welding wire.

1.2 Application

This wire has been used typically as filler metal for gas-metal-arc and gas-tungsten-arc welding of aluminum alloy castings having similar composition and requiring, in the weld zone, response to heat treatment, properties, and corrosion resistance comparable to those of the castings, but usage is not limited to such applications.

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 (U.S. and Canada only) or +1 724-776-4970 (outside U.S. and Canada), www.sae.org.

AMS2355	Quality Assurance, Sampling and Testing, Aluminum Alloys and Magnesium Alloy, Wrought Products (Except Forging Stock), and Rolled, Forged, or Flash Welded Rings
AMS2813	Packaging and Marking of Packages of Welding Wire, Standard Method
AMS2814	Packaging and Marking of Packages of Welding Wire, Premium Quality

SAE Executive Standards Committee Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2026 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, or used for text and data mining, AI training, or similar technologies, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER:
Tel: 1-877-606-7323 (U.S. and Canada only)
Tel: 1-724-776-4970 (outside U.S. and Canada)
Fax: 724-776-0790
Email: CustomerService@sae.org
<http://www.sae.org>

SAE WEB ADDRESS:

Full document details: SAE AMS4246G

For more information on this standard, visit
<https://www.sae.org/standards/content/AMS4246G/>

Documents

Standard, visit Sharing Hub

AMS2816	Identification, Welding Wire, Tab Marking Method
AMS2819	Identification, Welding Wire, Direct Color Code System
ARP4926	Alloy Verification and Chemical Composition, Inspection of Welding Wire
AS7766	Terms Used in Aerospace Metals Specifications

2.2 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 A5.01 Welding and Brazing Consumables - Procurement of Filler Metals and Fluxes

AWS A5.10 Specification for Bare Aluminum and Aluminum-Alloy Welding Electrodes and Rods

2.3 Definitions

Terms used in AMS are defined in AS7766.

3. TECHNICAL REQUIREMENTS

3.1 Wire shall be in accordance with AWS A5.10 R-357.0 and the following:

3.1.1 Sizes and Tolerances

Wire shall be supplied in the standard sizes and to the tolerances specified in AWS A5.10. When wires are ordered with diameters smaller than the smallest wire diameter specified in the reference specification, the wire shall have the same tolerance as the smallest wire diameter specified in the reference specification.

3.2 Exceptions

Any exceptions shall be authorized by the purchaser and reported as in 4.4.1.1.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for Inspection

The producer of wire shall supply all samples for the producer's tests and shall be responsible for the performance of all required tests. The purchaser reserves the right to sample and to perform any confirmatory testing deemed necessary to ensure that the wire conforms to specified requirements.

4.2 Classification of Tests

4.2.1 Acceptance Tests

Chemical analysis (refer to AWS A5.10), bead-on-plate testing (refer to AWS A5.10), sizes and tolerances (refer to AWS A5.10), and alloy verification (see 5.1) are acceptance tests and shall be performed on each inspection lot.

4.3 Sampling and Testing

Shall be in accordance with AWS A5.01 Class S4.