



AEROSPACE MATERIAL SPECIFICATION

AMS6460™**REV. G**

Issued	1954-11
Revised	2006-01
Reaffirmed	2010-10
Stabilized	2015-09

Superseding AMS6460F

Wire, Steel Welding
0.75Si - 0.62Cr - 0.20Mo - 0.10Zr (0.10 - 0.17C)
(Composition similar to UNS K11365)

RATIONALE

AMS6460G is stabilized as the document is not in use.

STABILIZED NOTICE

AMS6460G has been declared "STABILIZED" by AMS Committee E. This document will no longer be updated and may no longer represent standard industry practice. This document was stabilized because Committee E cannot find users for this document. Previously this document was reaffirmed. The last technical update of this document occurred in January 2006. Users of this document should refer to the cognizant engineering organization for disposition of any issues with reports/certifications to this specification; including exceptions listed on the certification. NOTE: In many cases, the purchaser may represent a sub tier supplier and not the cognizant engineering organization.

SAE Technical Standards Board 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 © 2015 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

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

SAE WEB ADDRESS:

Full document details: [SAE AMS6460G](#)

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AMS6460G>

Documents

Document Sharing Hub

1. SCOPE:

1.1 Form:

This specification covers a low-alloy steel in the form of welding wire.

1.2 Application:

This wire has been used typically as filler metal for gas-tungsten-arc and gas-metal-arc welding of low-alloy steels requiring a joint capable of being heat treated to strength levels consistent with the metals joined, but usage is not limited to such applications.

1.3 Classification:

Wire shall be classified as follows:

Type 1 - Bare Wire

Type 2 - Copper Coated

1.3.1 Type 1 shall be supplied unless Type 2 is permitted or required by purchaser.

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, 400 Commonwealth Drive, Warrendale, PA 15096-0001 or www.sae.org.

AMS 2259	Chemical Check Analysis Limits, Wrought Low-Alloy and Carbon Steels
AMS 2370	Quality Assurance Sampling and Testing, Carbon and Low-Alloy Steel Wrought Products and Forging Stock
AMS 2813	Packaging and Marking of Packages of Welding Wire, Standard Method
AMS 2816	Identification, Welding Wire, Tab Marking Method
AMS 2819	Identification, Welding Wire, Direct Color Code System
ARP1876	Weldability Test for Weld Filler Metal Wire
ARP4926	Alloy Verification and Chemical Composition Inspection of Welding Wire

2.2 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 or www.astm.org.

ASTM E 350	Chemical Analysis of Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron
------------	--

3. TECHNICAL REQUIREMENTS:

3.1 Composition:

Wire shall conform to the percentages by weight shown in Table 1, determined by wet chemical methods in accordance with ASTM E 350, by spectrochemical methods, or by other analytical methods acceptable to purchaser.

TABLE 1 - Composition

Element	min	max
Carbon (3.1.2)	0.10	0.17
Manganese	0.50	0.80
Silicon	0.60	0.90
Phosphorus	--	0.040
Sulfur	--	0.040
Chromium	0.50	0.75
Molybdenum	0.15	0.25
Zirconium	0.05	0.15
Nickel	--	0.25
Copper (3.1.2)	--	0.35

3.1.1 Check Analysis: Composition variations shall meet the applicable requirements of AMS 2259.

3.1.2 Shall be determined on finished wire for carbon, and on finished wire for copper if wire is supplied copper clad.