AEROSPACE MATERIAL SPECIFICATION

AMS5679™	REV. H

Issued 1951-11
Reaffirmed 2008-11
Revised 2015-12

Superseding AMS5679G

Nickel Alloy, Corrosion and Heat Resistant, Welding Wire
73Ni - 15.5Cr - 2.2Cb - 8.0Fe
(Composition similar to UNS N06062)

RATIONALE

AMS5679H has been updated to incorporate the standard quality requirements of AMS materials as the ordering requirements for AWS specified wire, and is a Five Year Review and update of this specification.

1. SCOPE

1.1 Form

This specification covers a corrosion and heat resistant nickel alloy in the form of welding wire.

1.2 Application

This wire has been used typically as bare wire filler metal for gas-tungsten-arc or gas-metal-arc welding of parts fabricated from alloys of similar composition, 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 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS2813 Packaging and Marking of Packages of Welding Wire, Standard Method

AMS2814 Packaging and Marking of Packages of Welding Wire, Premium Quality

AMS2816 Identification, Welding Wire, Tab Marking Method

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
SAE WEB ADDRESS: **http://www.sae.org**

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AMS5679H

AMS2819 Identification, Welding Wire, Direct Color Code System

ARP4926 Alloy Verification and Chemical Composition Inspection of Welding Wire

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 Consumables-Procurement of Filler Metals and Fluxes

AWS 5.14 Specification for Nickel and Nickel-Alloy Bare Welding Electrodes and Rods

3. TECHNICAL REQUIREMENTS

Wire shall meet the technical requirements of AWS A5.14 ERNiCrFe-5.

3.1 Sizes and Tolerances

Wire shall be supplied in the sizes and to the tolerances specified in AWS A5.14. Smaller diameter wires when ordered shall be supplied in sizes and tolerances shown in 3.1.1.

3.1.1 Diameter

Shall be as shown in Table 1.

Table 1A - Wire sizes and tolerances, inch/pound units

Form	Nominal Diameter Inch	Tolerance Inch Plus	Tolerance Inch Minus
Cut Lengths	0.030, 0.035, 0.045	0.001	0.002
Spools	0.007, 0.010, 0.015	0.0005	0.0005

Table 1B - Wire sizes and tolerances, SI units

Form	Nominal Diameter Millimeters	Tolerance Millimeter Plus	Tolerance Millimeter Minus
Cut Lengths	0.76, 0.89, 1.14	0.025	0.05
Spools	0.18, 0.25, 0.38	0.013	0.013

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for Inspection

The producer of the wire shall supply all samples for producer's tests and shall be responsible for the performance of all required tests. 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

Composition, sizes and tolerances (3.1), and alloy verification (5.1) are acceptance tests and shall be performed on each heat or lot as applicable.

4.3 Sampling and Testing

Shall be in accordance with AAWS A5.01 S3, testing schedule 5 or J.

4.4 Reports

The producer of wire shall furnish with each shipment a report showing the results of tests for chemical composition of each heat and stating that the wire conforms to the other technical requirements. This report shall include the purchase order number, heat and lot numbers, AMS5679H, nominal size, and quantity.

4.5 Resampling and Retesting

Shall be in accordance with AWS A5.01.

5. PREPARATION FOR DELIVERY

5.1 Alloy Verification

5.1.1 Wire from each spool or package of cut lengths shall be alloy verified by a method acceptable to purchaser and producer. The alloy verification methods of ARP4926 are recommended.

5.1.2 An 8 inch (203 mm) length of wire shall be made accessible at both ends of each spool for alloy verification.

5.2 Identification

Shall be in accordance with AMS2816 unless AMS2819 or another method is specified by purchaser.

5.3 Packaging and Marking

Shall be in accordance with AMS2813 unless AMS2814 or another method is specified by purchaser.

6. ACKNOWLEDGMENT

A producer shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

7. REJECTIONS

Wire not conforming to this specification, or to modifications authorized by purchaser, will be subject to rejection.