

AEROSPACE MATERIAL SPECIFICATIONS

AMS 2814

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

Issued 1-15-63
Revised

PACKAGING OF WELDING WIRE Premium Quality

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. APPLICATION: To assure cleanliness and freedom from corrosion of bare wire for welding.
3. PACKAGING: Wire shall be packaged in such a manner as to ensure that the wire, during shipment and storage, will be protected against mechanical injury, oxidation, corrosion, and contaminating substances detrimental to quality of welds. Packaging shall be performed in an atmosphere of sufficiently low humidity, depending upon the corrosion rate of the material, to ensure that wire will not be corroded during the packaging operation. Wire, after cleaning preparatory to packaging, shall not be handled with bare hands or unclean gloves.
 - 3.1 Cut Lengths: Unless otherwise specified in the wire specifications or on the purchase order, not more than 40 lengths of wire shall be packaged in an envelope, or in each compartment of a multiple-compartment envelope. Envelopes shall be made of a material free from oil vapors or other substances detrimental to welding operations. Envelope material used in packaging wire which is susceptible to corrosion (e.g. aluminum, magnesium) shall have a water vapor transmission rate lower than 0.05 g per 100 sq in. per 24 hr at 100 F (37.8 C) and 90% relative humidity. Envelopes shall be of sufficient strength to withstand normal handling; ends of wires may be capped to prevent puncturing the envelope. Envelopes may be purged with inert gas and this gas maintained as the atmosphere in the envelope and desiccants may also be added for further protection against oxidation and corrosion of the wire, as agreed upon by purchaser and vendor. Envelopes in which an inert gas atmosphere is used shall be heat sealed.
 - 3.2 Spooled Wire:
 - 3.2.1 Spools shall be of such materials and construction as to provide adequate strength and rigidity to prevent damage or distortion in normal handling and use and to insulate the wire from the spindle.
 - 3.2.2 Unless otherwise specified, spool dimensions shall conform to the approximate dimensions shown in Fig. 1. Barrel diameter "B" shall be such as to permit proper feeding of the wire. Holes shall be provided in the flange at the surface of the hub and near the OD of the flange for the start and finish ends of the wire. These holes need not be in line.

Section 8.3 of the SAE Technical Board rules provides that: "All technical reports, including standards approved and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no intent to adhere to any SAE standard or recommended practice, and no commitment to conform to or be guided by any technical report. In formulating and approving technical reports, the Board and its Committees will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against infringement of patents."

- 3.2.3 Unless otherwise specified, wire shall be one continuous length, layer wound, and furnished on spools of approximately 1, 2.5, 5, 7, 10, 12.5, or 25 lb net weight, as ordered; up to 20% of the net weight of any lot in the shipment may be on spools containing not less than 50% of the ordered spool net weight.
- 3.2.4 Unless otherwise specified, spooled wire shall be packaged in hermetically sealed containers with a desiccant or dry, inert atmosphere, or both.
4. PACKING: Envelopes of cut lengths shall be packed in standard exterior shipping containers of approximately 5, 10, 50, or 100 lb, as ordered. Containers of spooled wire shall be packed in standard exterior shipping containers containing the ordered multiple of standard spool weights up to a maximum net weight of 100 pounds.
5. IDENTIFICATION:
- 5.1 Cut Lengths: Each envelope shall be imprinted with, or shall bear a label showing, the following information; if the envelope is made of a transparent material, the label may be inserted in the envelope:

WIRE, WELDING

WIRE SPECIFICATION NUMBER _____

SIZE _____

QUANTITY _____

HEAT NUMBER (If Applicable) _____

MANUFACTURER'S IDENTIFICATION _____

WIRE IDENTIFICATION SPECIFICATION _____

CODE NUMBER _____

DO NOT HANDLE WIRE WITH BARE HANDS OR UNCLEAN GLOVES. OPEN ENVELOPES SHALL NOT BE RETURNED TO THE STOCKROOM.

- 5.2 Spooled Wire: Spools shall be marked as required by the applicable wire identification or material specification; one end of each spool container shall be permanently and legibly marked with the following information:

WIRE, WELDING

WIRE SPECIFICATION NUMBER _____

SIZE _____

QUANTITY _____

HEAT NUMBER (If Applicable) _____

MANUFACTURER'S IDENTIFICATION _____

WIRE IDENTIFICATION SPECIFICATION _____

CODE NUMBER _____

DO NOT HANDLE WIRE WITH BARE HANDS OR UNCLEAN GLOVES. OPEN CONTAINERS SHALL NOT BE RETURNED TO THE STOCKROOM.