AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
29 West 39th Street
New York City

AMS5683A

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ALLOY WIRE, CORROSION AND HEAT RESISTANT
Cold Drawn

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. APPLICATION: Primarily for welding rod.

3. COMPOSITION:

Carbon	0.15 max
Manganese	1.00 max
Silicon	0.50 max
Chromium	14.00 - 17.00
Nickel + Cobalt	72.00 min
Cobalt, if determined	1.00 max
Iron	6.00 - 10.00
Copper	0.50 max

4. CONDITION: Cold-drawn, unless otherwise specified.

5. TECHNICAL REQUIREMENTS: Wire, melted during welding, shall flow smoothly and evenly, and shall be capable of producing acceptable welds.

6. QUALITY: Wire shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to its use for welding purposes.

7. TOLERANCES: Unless otherwise specified, diameter of the wire shall vary not more than plus 0.001 in. and minus 0.003 in. from the diameter ordered.

8. REPORTS: Unless otherwise specified, the vendor of wire shall furnish with each shipment three copies of a notarized report of the results of tests for chemical composition of each heat in the shipment. This report shall include the purchase order number, heat number, material specification number, size, and quantity from each heat.

9. IDENTIFICATION:

9.1 Packaging shall be accomplished in such a manner as to ensure that the wire, during shipment and storage, will be protected against mechanical injury and exposure to moisture.

9.2 Each bundle or container shall be permanently and legibly marked with the following information:

ALLOY WIRE, CORROSION AND HEAT RESISTANT
AMS 5683A
SIZE _____
QUANTITY _____
HEAT NUMBER _____
PURCHASE ORDER NUMBER _____
MANUFACTURER'S IDENTIFICATION _____