

AERONAUTICAL MATERIAL SPECIFICATION

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

AMS 5786

Issued 2-1-56

Revised

ALLOY WIRE, CORROSION AND HEAT RESISTANT Nickel Base - 5Cr - 24.5Mo - 5.5Fe

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. APPLICATION: Primarily for use as bare wire filler metal for welding similar or dissimilar corrosion and heat resistant alloys.
3. COMPOSITION:

Check Analysis Under Min or Over Max

Carbon	0.12 max	--	0.01
Manganese	1.00 max	--	0.03
Silicon	1.00 max	--	0.05
Phosphorus	0.040 max	--	0.005
Sulfur	0.030 max	--	0.005
Chromium	4.00 - 6.00	0.15	0.15
Cobalt	2.50 max	--	0.05
Molybdenum	23.00 - 26.00	0.25	0.25
Iron	4.00 - 7.00	0.15	0.15
Vanadium	0.60 max	--	0.05
Nickel	remainder	--	--

4. CONDITION: Drawn and bright annealed, unless otherwise ordered.
5. TECHNICAL REQUIREMENTS: Melted wire shall flow smoothly and evenly during welding 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:
 - 7.1 Unless otherwise specified, straight lengths shall not vary more than plus and minus 1/4 in. from the length ordered.
 - 7.2 Unless otherwise specified, diameter of the wire shall not vary more than plus and minus 0.002 in. from the size ordered.
8. REPORTS:
 - 8.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a 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.