

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
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## AMS 5686

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Revised

### STEEL WIRE, CORROSION RESISTANT Rivet Wire 18 Chromium, 10 Nickel (Annealed)

1. ACKNOWLEDGMENT: Vendor shall mention this specification number in all quotations and when acknowledging purchase orders.

2. COMPOSITION:

Carbon	0.08 max
Manganese	0.20 to 2.50
Silicon	0.20 to 1.50
Phosphorus	0.04 max
Sulphur	0.04 max
Copper	0.05 max
Chromium	17.00 min
Nickel	10.50 min

3. CONDITION: (a) Annealed, pickled, drawn to a maximum tensile strength of 105,000 lbs. per sq in. and coated with a lubricant suitable for the fabrication of rivets.

(b) The wire shall be capable of bending flat on itself without cracking. Cracking or spalling of the coating shall not be cause for rejection.

4. QUALITY: (a) The wire prior to coating shall be uniform in quality and temper, cylindrical, clean, smooth, and free from kinks, twist, scrapes, splits, cold shuts and other injurious defects.

(b) The surface prior to the application of the coating must have a bright, smooth, cold drawn finish, free from pits, abrasions, and other surface imperfections.

(c) The coating must be uniform and capable of withstanding rubbing, abrasion and shock of normal handling during shipping, stocking and use.

5. TOLERANCES: The following variations in diameter of the uncoated rivet wire are permissible. All dimensions are in inches.

<u>Diameter</u>	<u>Tolerance</u>
Up to 9/32 Incl.	$\pm 0.001$

6. APPROVAL: Unless otherwise specified, samples shall be approved by the purchaser before production material is supplied. A change in lubricant shall not be made after approval without prior notification of the purchaser.