

# AEROSPACE

## MATERIAL SPECIFICATIONS

AMS 4180B

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

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### ALUMINUM WIRE 99.0 Min Al (1100-H18)

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 metal spraying, but may be used for other purposes where applicable.

3. COMPOSITION:

Aluminum	99.0 min
Iron plus Silicon	1.0 max
Copper	0.20 max
Manganese	0.05 max
Zinc	0.10 max
Other Impurities, each	0.05 max
Other Impurities, total	0.15 max

4. CONDITION: Drawn, full hard (-H18) temper.

5. TECHNICAL REQUIREMENTS:

5.1 Tensile Strength: 22,000 psi, minimum.

5.2 Recoil: Wire shall not recoil of its own volition during use.

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

7. SIZE: Unless otherwise specified, wire shall be 0.091 in. in diameter. Other sizes commonly used for metal spraying are 0.125 in. and 0.1875 in. in diameter.

8. TOLERANCES: Unless otherwise specified, tolerances for all sizes of wire shall be plus 0.0005 in. and minus 0.0025 inch.

9. REPORTS:

9.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report stating that the product conforms to the chemical composition and technical requirements of this specification. This report shall include the purchase order number, material specification number, size, and quantity.