

# AERONAUTICAL MATERIAL SPECIFICATION

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

## AMS 4067A

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### ALUMINUM ALLOY TUBING (Seamless) 1.3Mn (3S-F14)

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

Manganese	1.00 - 1.50
Iron	0.70 max
Silicon	0.60 max
Copper	0.20 max
Zinc	0.10 max
Other Impurities, each	0.05 max
Other Impurities, total	0.15 max
Aluminum	remainder
3. **CONDITION:** Half hard.
4. **TECHNICAL REQUIREMENTS:**
  - 4.1 **Physical Property:** Shall be as follows:

Tensile Strength, psi	19,500 min
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  - 4.2 **Flattening:** Tubing having nominal wall thickness less than 0.125 in. shall be capable of being flattened sidewise under a gradually applied load, without cracking, to an outside dimension six times the wall thickness while under load.
  - 4.3 **Flaring:** When specified, tubing shall be capable of being flared sufficiently for use in standard compression type fittings using usual shop equipment and practices.
5. **QUALITY:** Tubing shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts.
6. **TOLERANCES:** Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2203 as applicable. Diameter and wall thickness tolerances shall be as specified below:
  - 6.1 **Diameter:** Table I, columns headed "Mean Diameter" and "Individual Diameter" for Non-Heat Treatable Alloys.
  - 6.2 **Wall Thickness:** Table II, column headed "Individual Wall Thickness" for Non-Heat Treatable Alloys.
7. **REPORTS:**

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