AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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New York City

AMS4065A

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ALUMINUM ALLOY TUBING (SEAMLESS)
1.3Mn (3S-0)

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: Annealed.

4. TECHNICAL REQUIREMENTS:

4.1 Physical Property: Shall be as follows:

Tensile Strength, psi	19,000 max

4.2 Flattening: Tubing shall be capable of being flattened flat upon itself, sidewise, under a gradually applied load, without cracking.

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, column headed "Mean Diameter".

6.2 Wall Thickness: Table II, column headed "Individual Wall Thickness" for Non-Heat Treatable Alloys.

7. REPORTS:

7.1 Unless otherwise specified, the vendor of tubing shall furnish with each shipment three copies of a notarized report stating that the physical properties and chemical composition of the tubing conform to the requirements specified. This report shall include the purchase order number, material specification number, size, and quantity.