



AEROSPACE MATERIAL SPECIFICATIONS

AMS 4062D

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

485 Lexington Ave., New York, N. Y. 10017

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ALUMINUM TUBING, SEAMLESS, DRAWN, ROUND (1100 - H14)

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

2. COMPOSITION:

	min	max
Aluminum (by difference)	99.00	--
Iron + Silicon	--	1.0
Copper	--	0.20
Zinc	--	0.10
Manganese	--	0.05
Other Impurities, each	--	0.05
Other Impurities, total	--	0.15

3. CONDITION: Half hard.

4. TECHNICAL REQUIREMENTS: The product shall conform to the following requirements; tensile properties shall be determined in accordance with the latest issue of AMS 2355.

4.1 Tensile Properties: The following requirement applies to tubing having nominal wall thickness of \emptyset 0.014 - 0.500 in. , inclusive:

Tensile Strength, psi	16,000 min
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4.2 Flattening: Tubing having nominal wall thickness less than 10% of the nominal OD shall be capable of withstanding, without cracking, flattening sideways under a load applied gradually at room temperature until the outside dimension under load is equal to 6 times the nominal wall thickness.

4.2.1 If tubing does not pass the flattening test of 4.2, a section of the tube not less than 1/2 in. in length and embracing 1/3 to 1/2 the circumference of the tube shall be capable of withstanding, without cracking, bending at room temperature through an angle of 180 deg around a diameter equal to 4 times the nominal wall thickness of the tubing with axis of bend parallel to axis of tube and with inside of tube on inside of bend.

4.3 Flarability: Tubing with nominal OD of 0.375 in. and under shall be capable of being double-flared and tubing with nominal OD over 0.375 in. shall be capable of being single-flared without formation of cracks or other visible defects. Specimens for flaring may be cut from any portion of the tube, or an entire tube may be used as a specimen. The end of the specimen to be flared shall be cut square, with the cut end smooth and free from burrs, but not rounded except for sizes 0.375 in. , and under. The specimen shall, at room temperature, be forced axially with steady pressure over a hardened and polished tapered steel pin having a 74 deg included angle, to produce a flare having the permanent expanded OD specified in the following table:

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