AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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New York City

AMS 4908

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Revised

TITANIUM ALLOY SHEET
8 Mn
Annealed - 110,000 psi Yield

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

2. FORM: Sheet, strip, and plate.

3. APPLICATION: Primarily for parts requiring strength up to 600 F and oxidation resistance up to 800 F.

4. COMPOSITION:

Titanium	91.0 min
Manganese	7.0 - 9.0
Carbon	0.20 max
Other Elements, Total	0.80 max

5. CONDITION: Unless otherwise specified, hot rolled, with or without subsequent cold reduction, annealed, descaled and leveled, having a surface appearance comparable to a commercial corrosion resistant steel No. 2D Finish.

6. TECHNICAL REQUIREMENTS:

6.1 Tensile Properties: Material shall conform to the following requirements, and shall be capable of meeting these requirements after being heated to any temperature up to 1000 F for approximately 30 min. in air and cooled in air. These properties apply when the rate of strain is maintained at approximately 0.005 in. per in. per min. to the yield strength.

Tensile Strength, psi	120,000 min
Yield Strength at 0.2% Offset or at 0.0182 in. in 2 in. Extension Under Load (E=15,500,000), psi	110,000 min
Elongation, % in 2 in.	10 min

6.2 Bending: Material shall withstand, without cracking, bending at room temperature through an angle of 105 degrees around a diameter equal to the bend factor times the nominal thickness of the material, with axes of bends both perpendicular and parallel to the direction of rolling.

Nominal Thickness Inch	Bend Factor
Under 0.070	6
0.070 and over	7

7. QUALITY: Material 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.

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