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Vacuum Melted - Solution Heat Treated

6.3 Bending: Material shall withstand, without cracking, bending at room temperature, through an angle of 180 deg around a diameter equal to 1.5 times the nominal thickness of the material, with axis of bend parallel to the direction of rolling.

6.4 Properties After Precipitation Heat Treatment: Material shall be capable of meeting the following requirements after heating to 1650 F $\pm$ 25, holding at heat for 4 hr, and cooling in air.

6.4.1 Tensile Properties at Room Temperature:

Tensile Strength, psi	160,000 min
Yield Strength at 0.2% Offset or at 0.0103 in. in 2 in. Extension Under Load ($E = 31,500,000$), psi	100,000 min
Elongation, % in 2 in.	10 min

6.4.1.1 Tensile Properties at 1500 F: Tensile specimens shall be heated to 1500 F $\pm$ 10, held at 1500 F $\pm$ 10 for 30 min. before testing, and tested at 1500 F $\pm$ 10 at a rate of approximately 0.005 in. per in. per min. to the 0.2% yield point and shall conform to the following requirements.

Tensile Strength, psi	85,000 min
Yield Strength at 0.2% Offset or at 0.0103 in. in 2 in. Extension Under Load ($E = 31,500,000$), psi	70,000 min
Elongation, % in 2 in.	8 min

6.4.1.2 For widths 9 in. and over, tensile test specimens shall be taken with the axis perpendicular to the direction of rolling. For widths less than 9 in., tensile test specimens shall be taken with the axis parallel to the direction of rolling.

6.4.2 Grain Size: Shall be predominantly 3 or finer with occasional grains as large as 1 permissible, as determined by comparison of a polished and etched specimen with the chart in ASTM E-112-58T.

7. QUALITY: Material shall be produced by vacuum induction melting or by double vacuum melting. It shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external imperfections detrimental to fabrication or to performance of parts.

8. TOLERANCES: Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2262 as applicable.

9. REPORTS:

9.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report of the results of tests for chemical composition of each heat in the shipment and the results of tests on each thickness from each heat to determine conformance to the technical requirements of this specification. This report shall include the purchase order number, heat number, material specification number, size, and quantity from each heat.