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5.2 Tensile Properties:

| Nominal Thickness<br>Inches | Tensile<br>Strength<br>psi, min | Yield Strength at 0.2% Offset<br>or at Extension Indicated<br>(See 5.2.1) |                                      | Elongation<br>% in 2 in.<br>or 4D<br>min |
|-----------------------------|---------------------------------|---------------------------------------------------------------------------|--------------------------------------|------------------------------------------|
|                             |                                 | psi, min                                                                  | Extension Under Load<br>in. in 2 in. |                                          |
| 0.250 to 0.499, incl        | 75,000                          | 64,000                                                                    | 0.0168                               | 8                                        |
| Over 0.499 to 1.000, incl   | 77,000                          | 66,000                                                                    | 0.0168                               | 6                                        |
| Over 1.000 to 2.000, incl   | 77,000                          | 66,000                                                                    | 0.0168                               | 4                                        |
| Over 2.000 to 2.500, incl   | 73,000                          | 62,000                                                                    | 0.0160                               | 3                                        |
| Over 2.500 to 3.000, incl   | 70,000                          | 60,000                                                                    | 0.0157                               | 3                                        |
| Over 3.000 to 3.500, incl   | 70,000                          | 57,000                                                                    | 0.0151                               | 3                                        |
| Over 3.500 to 4.000, incl   | 67,000                          | 53,000                                                                    | 0.0143                               | 2                                        |

5.2.1 Extension under load is based upon the following values of E:

| Nominal Thickness<br>Inches | E          |
|-----------------------------|------------|
| 0.250 to 0.499, incl        | 10,000,000 |
| Over 0.499                  | 10,300,000 |

5.2.2 When a dispute occurs between purchaser and vendor over the yield strength values, yield strength determined by the offset method shall apply.

5.2.3 Tensile properties of plate thicker than 4.000 in. shall be as agreed upon by purchaser and vendor.

5.3 Bending: Material 0.499 in. and under in thickness shall be capable of withstanding, without cracking, bending at room temperature through an angle of 180 deg around a diameter equal to 12 times the nominal thickness of the material, with axis of bend parallel to direction of rolling.

6. QUALITY: Material 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.

7. TOLERANCES: Unless otherwise specified, tolerances shall conform to all applicable requirements of the latest issue of AMS 2202.

8. REPORTS:

8.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report stating that the product conforms to the chemical composition and technical requirements of this specification. This report shall include the purchase order number, material specification number, thickness, size, and quantity.

8.2 Unless otherwise specified, the vendor of finished or semi-finished parts shall furnish with each shipment three copies of a report showing the purchase order number, material specification number, contractor or other direct supplier of material, part number, and quantity. When material for making parts is produced or purchased by the vendor, that vendor shall inspect each lot of material to determine conformance to the requirements of this specification, and shall include in the report a statement that the material conforms, or shall include copies of laboratory reports showing the results of tests to determine conformance.