



- 6.1.1.1 Tensile test specimens from rods and bars over 1.5 in. in diameter or distance between parallel sides shall have their axes located approximately midway between center and surface.
- 6.2 Hardness: Material, including forgings but excluding forging stock, shall have hardness not lower than Brinell 130 using 1000 kg load, or equivalent hardness  $\emptyset$  by other methods, on the surface, except on rounds, where a flat as necessary for accuracy may be made, or not lower than Rockwell B 80 when taken half-way between center and surface of the cross section.
- 6.3 Mercurous Nitrate Test: Test specimens as in 6.3.1, 6.3.2, and 6.3.3 shall be  $\emptyset$  capable of withstanding, without cracking, testing in accordance with ASTM B154-51, Procedure A.
- 6.3.1 Rods and Bars: Test specimens shall be of full cross section and shall have length of either 6 in. or twice the diameter or minimum distance between parallel sides, whichever is greater.
- 6.3.2 Forgings: Test specimens may be any convenient size or shape, or an entire forging may be used.
- 6.3.3 Tubing: Test specimens shall be full cross sections 6 in. long.
7. QUALITY: Material shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external imperfections detrimental to fabrication or to performance of parts.
8. TOLERANCE: Unless otherwise specified, tolerances shall conform to the following:
- 8.1 Rods and Bars: The latest issue of AMS 2221 as applicable. Diameter, thickness, and width tolerances shall be as specified below:
- 8.1.1 Rounds, Hexagons, and Octagons: Table I, Refractory.
- 8.1.2 Squares: Table IV.
- 8.1.3 Rectangles, Thickness: Table IV.
- 8.1.4 Rectangles, Width: Table VII, Refractory.
- 8.2 Tubing: The latest issue of AMS 2223 as applicable. Diameter and wall thickness tolerances shall be as specified below:
- 8.2.1 Diameter: Table I, Refractory.
- 8.2.2 Wall Thickness: Table III.
9. REPORTS:
- 9.1 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  $\emptyset$  include the purchase order number, material specification number, size, and quantity. If forgings are supplied, the part number and size of stock used to make the forgings shall also be included.