



- 6.2 Hardness: Material, including forgings but excluding forging stock, shall have hardness not lower than Brinell 130, using 1000 kg load, 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 and 6.3.2 shall be capable of withstanding, without cracking, immersion for 15 min. in an aqueous solution containing 100 g of mercurous nitrate and 13 ml of nitric acid (sp gr 1.42) per liter of solution, using at least 10 ml of solution per sq in. of test specimen surface area.
- 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.
7. QUALITY: Material shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts.
8. TOLERANCES: Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2221 as applicable. Diameter, thickness and width tolerances shall be as specified below:
- 8.1 Rounds, Hexagons and Octagons: Table I, Refractory.
- 8.2 Squares: Table IV.
- 8.3 Rectangles, Thickness: Table IV.
- 8.4 Rectangles, Width: Table VII, Refractory.
9. REPORTS:
- 9.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report showing the results of tests to determine conformance to the requirements of this specification or stating that the chemical composition of the product, tensile properties of rods and bars, and hardness of forgings conform to the requirements specified. This report shall 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.
- 9.2 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 parts 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.