

SCHEDULE 4

Gas Containers

Part II

Specification for brass or bronze valves

Manufacture of valves

1. The stamping or pressing from which a valve is manufactured shall be made from bars produced by (a) extrusion, (b) rolling, (c) forging, (d) extrusion and drawing, or (e) rolling and drawing.

Heat treatment

2. Stamping or pressing shall be heat treated so as to produce an equiaxed microstructure in the material.

Freedom from defects

3. Stampings, pressings and the bars from which they are made shall be free from cracks, laminations, hard spots, segregated materials and variations in composition.

Tensile test

4. Tensile tests shall be made on samples of stampings and pressings taken at random from any consignment. The result of the tensile test shall conform to the following conditions—

Yield Stress— Not less than 231.6 N/mm².

Ultimate Tensile Stress— Not less than 463.3 N/mm².

Elongation on 50mm gauge length— Not less than 25%.

Note— When the gauge length is less than 50mm the required elongation shall be proportionately reduced.

The fractured test piece shall be free from piping and other defects (see paragraph 3).