



## **IS 778: Specification for Copper Alloy Gate, Globe and Check Valves for Waterworks Purposes**

Valves are critical components used in fluid systems to **control, regulate, direct, or shut off** the flow of liquids, gases, or slurries within pipelines. They are essential for maintaining the efficiency, safety, and proper functioning of various systems.

Copper alloy gate, globe, and check valves are essential components for controlling fluid flow in industrial and commercial applications. Gate valves are used for full isolation, enabling complete flow control or shutoff, while globe valves regulate flow with precise throttling, and check valves prevent backflow, ensuring one-directional fluid flow.

Consumers expect high-quality parameters in these valves, including **corrosion resistance**, as copper alloys like brass, bronze, and cupronickel are highly resistant to corrosion, making them ideal for harsh environments such as marine, chemical, and water treatment systems. **Durability** is crucial, with valves designed to withstand high pressure, temperature fluctuations, and frequent use without failure. **Leak-tight sealing** is necessary to prevent fluid leakage, and valves should operate smoothly with minimal effort. **Ease of maintenance** is important, with valves requiring minimal upkeep and having replaceable parts.

**IS 778** is an Indian Standard that specifies the requirements for **copper alloy gate, globe, and check valves** used in **waterworks** applications. It provides guidelines on materials, design, construction, testing, and performance criteria to ensure that these valves are durable, reliable, and suitable for water distribution systems. The standard covers aspects such as leakage, pressure ratings, corrosion resistance, dimensions, and the quality of material used in the valve construction.