



Summary

Specification for manual blow pipes for welding and cutting

IS 7653: 1975

A **manual blow pipe**, also known as a **manual gas cutting and welding torch**, is a handheld tool essential in metalworking for **cutting and welding**. It functions by mixing oxygen with a fuel gas (like acetylene or propane) to produce a high-temperature flame capable of handling various metals and thicknesses. This tool allows for **precise control** with separate valves for oxygen and fuel gas adjustment, making it versatile and ideal for fabrication, construction, and repair work. Its **portability and ease of use** make it a popular choice for professionals across multiple industries.

Consumers of manual blow pipes expect **durability, safe operation, reliable flame stability, and resistance to backfire**. The blowpipe should be constructed from high-quality materials and designed to handle the demanding conditions of metalworking. Additionally, consumers expect **precise control of flame** intensity and flow rates, enabling effective performance across different applications and metal thicknesses. Safety features, such as flame stability and resistance to backfire, are also critical to prevent accidents during use.

IS 7653 is the Indian Standard specifying the requirements for gas welding blowpipes used in cutting, welding, and heating. The standard provides comprehensive guidelines on **design, material specifications, construction, and performance criteria** to ensure that blowpipes are safe and effective for professional use. It outlines specifications for various nozzle sizes and flow rates to accommodate different tasks and metal thicknesses.

The IS 7653 also includes **testing requirements** for durability, flame stability, and backfire resistance, addressing consumer expectations for safety and reliability. By adhering to this standard, manufacturers ensure that their blowpipes meet the **quality and safety standards** necessary for dependable use in metalworking and fabrication.