IS 447 : 1988 Rubber Hose For Welding — Specification

A rubber hose for welding is a specialized flexible rubber tube consisting of a lining, reinforcement and a cover. It is designed to transport gases (such as oxygen and acetylene) used in welding applications. These hoses are essential for gas welding where controlled delivery of gas is critical for safe and effective operation.

Indian standard IS 447:1988 specifies the requirements, method of sampling and test for rubber hose for welding. Compliance with IS 447:1988 ensures that rubber hoses for welding are safe, reliable, and effective for their intended applications.

Indian standard for Rubber hose for welding was first published in 1953 and subsequently revised in 1964 (first revision), 1968 (second revision), 1980 (third revision) and 1988 (fourth revision). The third revision of the standard was an amalgamated revision of IS 447 : 1968 and IS 3572: 1968 covering both the woven and braided constructions. In the fourth revision, requirements for adhesion strength, elongation at break and increase in outside diameter at working pressure have been modified.

Physical requirements specified in the standard such as tensile strength and accelerated ageing which ensure durability and flexibility of the hose. Performance requirements such as hydrostatic test pressure, burst pressure test and adhesion between components are specified in the standard to ensure structural integrity of the rubber hose. The standard also specifies dimensional requirements for nominal bore size and minimum thickness of lining and cover.

The standard aims to minimize hazards associated with welding operations by ensuring that the materials used can withstand the specific demands of the environment.

This standard is important for manufacturers and users of welding hoses to maintain safety and efficiency in welding operations.