

IS 8472:2019 Centrifugal Regenerative Pumps for Clear, Cold Water

This Indian Standard (IS 8472:2019), specifies the technical requirements for centrifugal regenerative pumps used for handling clear, cold water. These pumps operate by repeatedly accelerating the fluid using an impeller with radial blades. The fluid is transferred to the root of the next blade via a channel and gains additional energy, increasing velocity and pressure.

The standard covers both non-self-priming and self-priming pumps. It provides detailed descriptions of the pump's components, materials of construction, and performance characteristics.

The standard includes a comprehensive set of tests for verifying the pump's performance. These tests include:

- Hydrostatic test: Verifies the strength of the pump casing.
- Routine test: Checks the pump's performance under normal operating conditions.
- Type test: Evaluates the pump's performance under extreme conditions.
- Self-priming test: Measures the time required for the pump to prime itself.
- Electrical performance test: Evaluates the performance of the motor or engine driving the pump.

The standard also includes marking requirements for the pumps, including details such as manufacturer's name, model, type, serial number, operating head range, discharge, and efficiency.

This standard is a valuable tool for manufacturers, users, and testing laboratories involved in the design, production, testing, and selection of centrifugal regenerative pumps for clear, cold water applications.