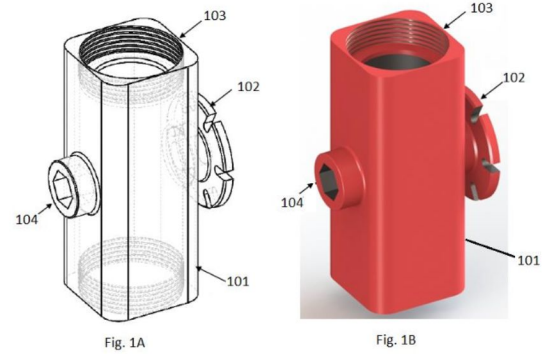


**GRANTED****(IN454925)**

# Method and apparatus for measuring the water-permeability of concrete



## NEED

Concrete's water permeability directly affects its durability and longevity. Current methods can be tedious and manual. What if there was a portable, automated system that made water-permeability testing faster, more efficient, and scalable?

## TECHNOLOGY OVERVIEW

This portable automated apparatus accurately measures the water permeability of concrete specimens. It utilizes rotational exposure to water, automated data collection, and simultaneous testing of multiple specimens. The system is designed for easy, reliable, and precise permeability testing in various environments.

## TECHNOLOGY KEY FEATURES

1) Portable and automated water-permeability testing. 2) Rotational agitation of specimens for accurate exposure. 3) Multiple specimen testing in parallel (up to three). 4) Power supply and mechanical force via motor for consistent performance. 5) Prevents water leakage with rubber gasket.

[Read more here](#)

## MARKET ANALYSIS

The global construction testing market is expected to grow at a CAGR of 6.7% from 2023 to 2033, driven by increasing construction standards and demand for accurate testing. (Source: Market Research Future)

## Target Industries

1) Construction material testing firms improving testing accuracy and efficiency. 2) Civil engineering research institutions conducting permeability tests for material development. 3) Construction companies requiring high-quality testing for durability assessment of materials.

## AT A GLANCE

- SDG 9 (Industry, Innovation, and Infrastructure), SDG 11 (Sustainable Cities and Communities)

Technology is available for licensing/ co-development.

Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre,  
BITS Pilani Contact Details: [tec.bits@pilani.bits-pilani.ac.in](mailto:tec.bits@pilani.bits-pilani.ac.in), 91 1596-255913