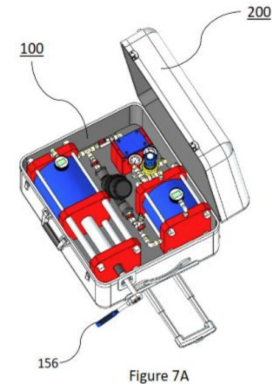


GRANTED**(IN501668)**

An apparatus for determining gas permeability of concrete and method thereof



NEED

Gas permeability of concrete is crucial for its durability. Existing methods often require external gas supplies and can be cumbersome. What if there was a compact, reusable system that could streamline the testing process?

TECHNOLOGY OVERVIEW

This apparatus determines the gas permeability of concrete by reusing and purifying gas, eliminating the need for external gas supplies. It measures permeability through pressure variations in a controlled specimen chamber, providing a more efficient and portable solution for concrete testing.

TECHNOLOGY KEY FEATURES

- 1) Compact design for easy transport and storage.
- 2) Reusable gas storage and purification system.
- 3) Pressure gauges for accurate gas permeability measurement.
- 4) No external gas supply required for repeated testing.
- 5) Easy-to-use specimen chamber with adjustable pressure regulation.

[Read more here](#)

MARKET ANALYSIS

The construction testing market is expected to grow at a CAGR of 7.8% from 2023 to 2033, driven by the demand for durable, high-quality concrete and more efficient testing methods. (Source: Global Market Insights, 2023)

Target Industries

- 1) Concrete testing firms offering advanced permeability testing solutions.
- 2) Construction and infrastructure companies in need of reliable quality control for concrete materials.
- 3) Sustainable construction enterprises focusing on enhancing concrete performance and durability.

AT A GLANCE

- SDG 9 (Industry, Innovation, and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production)

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, 91 1596-255913