### **VERTECHS**

# **HPIT High-Pressure Invasion Tester**

The HPIT High-Pressure Invasion Tester, a patented product of Vertechs, is specifically designed for field testing of the invasiveness of drilling fluids (mud or lost circulation slurries) into formations. This instrument combines the advantages of traditional drilling fluid invasion testers and high-pressure lost circulation material (LCM) testers. It enables pressurisation without relying on external energy sources (such as compressed gas or electricity), thereby filling a technological gap in the field of real-time monitoring with similar equipment at the wellsite. The HPIT allows a single operator to quickly complete invasion tests for lost circulation materials and drilling fluids in any setting. Its core capability lies in accurately evaluating the plugging performance of drilling fluid sealing materials, with a wide range of applications: it can simulate the invasion behavior of drilling fluids into formations with different permeabilities, as well as assess the sealing effectiveness of lost circulation materials on a 5mm steel bead bed or slotted discs of various sizes. Its unique transparent high-pressure observation window makes the testing process and results more intuitive and reliable, providing clear and direct evidence for evaluating plugging performance!

### **FEATURES**

- Suitable for evaluating LCM performance and drilling fluid invasion
- Maximum test pressure differential up to 6 MPa, with a test accuracy of 0.34 MPa (50 psi)
- Requires no external power or gas supply for operation
- Simple and safe operation by a single person
- Equipped with a transparent visual window for intuitive test results



## **VERTECHS**

 Lightweight and portable design enables testing and evaluation anywhere, anytime





Fig. HPIT Portable Design

### **Contact Us**

engineering@vertechs.com

### Chengdu | Dammam | Houston | Calgary | Hong Kong

#### Disclaimer

This document and any files transmitted with it are for use between Vertechs Group and external partners related to the Group's business. Unauthorized use is prohibited, and the dissemination, copying, or distribution of this document and its contents is strictly forbidden until the information becomes public or loses its commercial value. Violators will be held legally responsible.

2025 Copyright © Vertechs Group. All rights reserved. www.vertechs.com