PRODUCT DATASHEET

# Core Flooding System

Reservoir floods at pressure and temperature





DETAIL – CORE HOLDER AND TRANSFER VESSELS IN THE OVEN

## OVERVIEW

The Tech Inc. Core Flooding System pushes brine, oil, gas, polymer or surfactant through a rock core under reservoir pressure and temperature, and measures pressure drop and produced fluids. A Hassler core holder and transfer vessels sit in an oven; precision pumps drive the fluids and a back pressure regulator holds pore pressure.

## MODELS AND CONFIGURATIONS

- **Single-core system** – standard plugs up to 6 inches long.
- **Long-core system** – composite cores up to 1 metre.
- **Visualisation option** – X-ray or CT-compatible carbon fibre holder.

## TYPICAL DESIGN DATA

| | |
|---|---|
| **Model** | TI-CFS-700 series |
| **Core size** | 1 and 1.5 inch diameter, other sizes on request |
| **Pore pressure** | Up to about 700 bar (10,000 psi) |
| **Confining pressure** | Up to about 1000 bar |
| **Temperature** | Ambient to 150 °C (200 °C option) |
| **Flow** | About 0.001 to 50 mL/min per pump |
| **Wetted parts** | 316 stainless steel; Hastelloy for corrosive fluids |

## APPLICATIONS

Relative permeability (steady and unsteady state), waterflood and chemical EOR, $CO_2$ and gas injection, formation damage and acidising studies, and CCS injectivity.

## KEY ADVANTAGES

- **Stable** – pulse-free pumps and tight pressure control
- **Flexible** – brine, oil, gas and chemical floods on one rig
- **Recorded** – every pressure, flow and volume logged
- **Safe** – relief valves, interlocks and an enclosed oven

**Designed and built by Tech Inc.** · **Part of the Davey Group since 1990**

Offices: Chennai · Toronto · Tallinn · Al Khobar

mail@techincresearch.com · +1 (289) 622-1032 · www.techincresearch.com

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