



## CORE ANALYSIS EQUIPMENT

For over 30 years OFI Testing Equipment (OFITE) has provided instruments and reagents for testing drilling fluids, well cements, completion fluids, and wastewater. In addition to these product lines we also offer a range of instruments for core analysis. From our manufacturing facility in Houston, TX we provide customers all over the world with quality products and exceptional service.

Our extensive line of Core Analysis products includes equipment for preparing core samples, routine testing, and advanced analysis.

As an independent manufacturer and supplier, OFITE has one priority, our customers.

# CRF-840 Rock-Fluid Centrifuge

A properly-equipped centrifuge has many applications in the study of the rock-fluid properties of hydrocarbon reservoirs. Processing the centrifuge core analysis results provides relative permeability and capillary pressure data applicable to reservoir production performance calculations. Because enormous forces on the pore fluids are easily generated in the centrifuge, it is possible to perform experiments that model gravity drainage production processes. Rates and end points are key concerns that can be derived from the measured centrifuge core analysis data.



## Features

- Solid construction with welded frame provides enhanced stability and safety
- Testing chamber is mounted on compressed vibration absorbers for smooth operation
- Top rotor shaft bearing enables stable and safe operation throughout the entire RPM range
- Integrated vacuum pump evacuates testing chamber so that the rotor can maintain high speeds
- Radiant heating system makes it possible to heat the core holders in a vacuum environment
- Integrated chiller for fast cool-down cycle after tests
- Hassler-type core holders apply equivalent confining pressure along the length of the cores
- Core holders are reversible for operating in either imbibition or drainage mode
- Computer with control and data acquisition software is included
- High-speed camera gives accurate measurements of the fluid interface changes
- Rigid camera mount ensures cell image alignment every time
- Auto Vacuum Switch



A Test Cell Attached to the Rotor





# Technical Specifications and Requirements

#700-570 CRF-840 Rock-Fluid Centrifuge

## Specifications

- Rotor
  - 4.25" Rotor
  - Average Radius:
    - Drainage: 6.5"
    - Imbibition: 9.5"
  - Maximum Speed: 5,000 RPM
  - Minimum Speed (with data acquisition simultaneously on all 4 core holders): 100 RPM
- Core holders
  - Sample Size: 1.0" and 1.5" diameter × 2.0" maximum length
  - Maximum Confining Pressure: 3,000 PSI
  - Maximum Temperature: 200°F (93.3°C)
- Camera
  - Resolution: 2048 linear pixels
  - Data rate: 1 reading per revolution below 700 RPM, 10 readings per second above 700 RPM

## Requirements

- Power: 220 Volt, 50/60 Hz, 1 Phase (20 Amp) and 3 Phase (30 Amp)

## Software Features

- LabView graphical operator interface, data collection, and control
- Capillary pressure data reduction guide and programmed spreadsheet included
- Other data processing packages may be available upon request

