

## Benchtop Core Flooding System

Flowing a fluid (oil/gas) at desired temperature and pressure

Generally, a core flood system is a system that flows a fluid (gas or liquid) through a core sample at controlled pressure and temperature conditions and measures or monitors flow parameters.

### Experiment Description

The dry core is saturated with brine. Then saturated core is flooded by oil until the saturation water reaches to the reservoir initial water saturation conditions. Afterwards oil saturated core will be flooded by brine at high pressure/temperature condition. The relative permeability of oil/brine will be estimated. Total oil production versus time will be plotted.



| Specification  | BCF-BR01        | BCF -PR01       | BCF -PS01       |
|--|-----------------|-----------------|-----------------|
| Pressure Accuracy  | 0.5% F.S.       | 0.05% F.S.      | 0.05% F.S.      |
| Core Length  | 2" to 4"        | 2" to 6"        | 2" to 10"       |
| Working Temperature  | 150°C<br>±0.1°C | 150°C<br>±0.1°C | 150°C<br>±0.1°C |
| Separator Volume Accuracy  | 0.5 ml          | 0.1 ml          | 0.05 ml         |
| Pore Pressure: up to 6,000 Psi   | ✓               | ✓               | ✓               |
| Confining Pressure: up to 6,300 Psi  | ✓               | ✓               | ✓               |
| Core Diameter: 1.5"  | ✓               | ✓               | ✓               |
| Pressure Taps: Inlet and Outlet of Core Holder                               | ✓               | ✓               | ✓               |
| Stainless Steel Material   | ✓               | ✓               | ✓               |
| Input Power Supply: 220 VAC, 50Hz  | ✓               | ✓               | ✓               |
| Force Convection Oven  | ✓               | ✓               | ✓               |
| Downstream Pressure Controller   | ✓               | ✓               | ✓               |
| Hand Pump  | ✓               | ✓               | ✓               |
| Computer Controlled System   | ✗               | ✓               | ✓               |
| User Friendly Automated Data Acquisition, Calculating And Reporting Software | ✗               | ✓               | ✓               |
| Pressure Sensors   | ✗               | ✗               | ✓               |
| Fast Measurement System  | ✗               | ✗               | ✓               |

### Contact info:

+98 71 3624 6968 / +98 71 3624 7604  
 info@petroazma.com  
 www.petroazma.com

### Address:

Fars Science and Technology Park,  
 Aryan St., Dr.Hesabi Blvd., Shiraz, I.R.Iran  
 P.O Code: 7197687811