



## Design and Manufacture of Oil and Gas Equipment

# Acidizing Core Flood Apparatus

The core acidizing system is designed to make it possible to inject an acid solution into the rock sample at reservoir conditions to modify the natural permeability of the rock by dissolving some minerals present in the rock. Since the material is Hastelloy, it is possible to determine the efficiency of different HCl-HF formulations and study the effects of flow rate and temperature on the permeability of the core samples. The Acidizing Core Flood System enables to perform:

- Liquid permeability measurement
- Unsteady state 2-phase relative permeability
- EOR studies such as water flooding, gas flooding, chemical flooding and etc.
- Acidizing studies
- Fluid distribution in multi-layered reservoirs
- Formation damage tests
- Stimulation studies





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### **Acidizing Core Flood**

#### **Features:**

**Maximum working pressure:** 700 bar (10,000 psi)

**Maximum confining pressure:** 700 bar (10,000 psi)

**Maximum working temperature:** 150°C

**Range of flow rate:** 0.001 to 100 cc/min

**Core length:** 7 to 30 cm

**Material:** Hasteloy

**Power supply:** 220 VAC, 50/60 Hz

**Note:** The aforementioned features can be changed upon the request.

#### **Components:**

- Core holder(s)
- Transfer vessel(s)
- Hand pump(s)
- Back pressure regulator
- Data acquisition
- Differential pressure transducer
- Oven