دستگاه سیلاب‌زنی مغزه

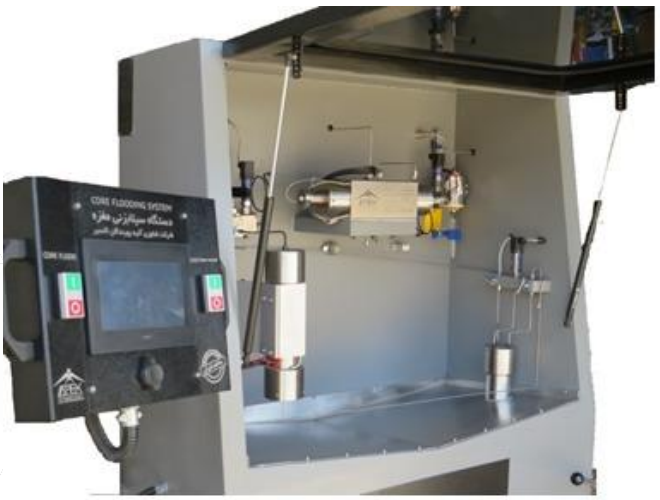
Core Flooding

(TRMF-P-400)

09188645324
07138225212
apextechnology.co@gmail.com
www.apextechnologiesco.ir

Apex technologies co., designed suitable Displacement Tests equipment called core flooding equipment to understand the oil trapping mechanisms and effective mechanism in oil recovery. In details, there are various possible techniques for Enhanced Oil Recovery (EOR) and Improved Oil Recovery (IOR) of depleted reservoir. In general, EOR refers to the process of producing hydrocarbons in an oil field by methods other than the conventional methods utilize reservoir energy and reservoir re-pressurizing schemes. In addition, Improved Oil Recovery (IOR) had a more generalized definition compared with EOR and refers to any processes that promote reservoir performance e.g. well stimulation and water control processes. Unfortunately, conventional production methods will produce about 30% of the initial oil in place from an oil reservoir while the remaining oil, with valuation of nearly 70% of the initial resource, is a large and attractive target for Enhanced Oil Recovery, (EOR) activities.

In the light of this huge amount of trapped and unrecovered oil application of EOR, IOR, Enhanced Gas Recovery and, Improved Gas Recovery gain an increasingly attention during the past decades and is still tremendously increasing. This is due to the fact that application of EOR/IOR techniques brings about new opportunities for the industry and at the same time new challenges that need to be addressed by laboratory studies. Due to technology diversity and different development level of Enhanced Oil Recovery Techniques, and Improved Oil Recovery methods, evaluation and selection of suitable EOR and IOR scenarios is generally complicated and requires good understanding of EOR/IOR techniques as well as reservoir characteristics & optimization.



Regarding this necessity, different types of core flooding equipment with different features and specification compatible with various purposes are designed by our engineers to accurately measure permeability changes to a formation core sample in a high temperature and high pressure environment, while exposing it to a variety of test fluids. A core that is collected from a formation is inserted into a core holder. A computer with special professional software controls the environment within the core holder and the injection rate and/or pressure of fluid into the core. Many different types of tests can be performed with these equipment by changing the test parameters, pressures, pattern of injection, changing the chemicals, etc.

دستگاه سیلاب‌زنی مغزه

Core Flooding

(TRMF-P-400)

0918864532 4
07138225212
apextechnology.co@gmail.com
www.apextechnologiesco.ir

Technical Specification:

General equipment to simulate the secondary, tertiary oil recovery processes including smart water injection, microbial EOR, …
Online software to log the pressure, displaced volume, injection rate, online permeability and temperature of the system
Hand pump equipped with a pressure gauge to control confining pressure × 1
Pressure transmitters × 2 (Keller)
Core diameter: 1.5”
Core length:1” to 4”
Valves: VEE LOK
Gas back pressure regulator × 1 (400 bar)
Pressure transmitter accuracy: 0.01 % full scale
Online software to log the operational data
The lowest dead volume among its kind
Heating mechanism: slim elements
Max. working temperature: 100 ºC
Easy load hassler core holder × 1
Wetted parts material: S.S.316 L
Max. working pressure: 400 bar
Temperature resolution: 0.1 ºC
Confining pressure: 400 bar
Accumulator × 2 (500 cc)
Accumulator × 1 (100 cc)
Low dead volume design
High pressure injection pump × 1 • Touch panel to control the operational parameters and monitoring the pump performance • Operational mode: constant pressure and constant flow rate modes • Necessary to inject the fluids into the core holder • Displaced volume resolution: 0.001 cc • Max. Injection pressure: 400 bar • Max. chamber volume: 500 cc • Min. flow rate: 0.01 cc/min • Max. flow rate: 15 cc/min • Valves and connections: Autoclave/BuTech/HIP • Wetted parts: Stainless steel 316L • Pressure transmitters ×1