

HPHT Imbibition Cell

Determination of Spontaneous Imbibition at Reservoir Conditions

This device is specially designed to determine the end points of spontaneous imbibition curve. It can then be used in conjunction with that of the forced imbibition curve (e.g. obtained by centrifugation or core flooding) to estimate the wettability indices via the Amott formula.

Experiment Description

The device is mainly comprised of two flow controlled loops to displace water or oil over a core at reservoir condition to recreate spontaneous imbibition phenomenon. The wetting and non-wetting phase volumes are continuously measured in a graduated glass separator. Multiple core sample configurations are also available upon request.

Specification	HIC-PR01
Working Pressure	6,000 Psi
Core Diameter	Up to 2 inches
Core length	Up to 4 inches
Pressure Accuracy	0.5% F.S.
Power Supply	220 VAC, 50 Hz
Working Temperature	Ambient up to 120 °C
Number of Fluid Transfer Vessel	1
Stainless Steel 316 Wetted Material (Other on Request)	✓
Force Convection Oven	✓
Downstream Pressure Controller	✓

Contact info: