



The PMI Advanced
Reservoir Fluid PVT System
PVT-19°C

Not just products...solutions!

DESCRIPTION

The fully visual Fluid Eval PVT system is designed to study phase behavior of reservoir fluids at reservoir conditions of pressure and temperature. The PVT cell is based on a window through cell offering full sample visibility. It is particularly interesting when visual observation of the fluid must be accomplished such as swelling tests, volatile oil studies, gas condensate studies, etc. The system uses an embedded high pressure pump to control the pressure and volume of the reservoir fluid in the cell. A motorized rocking system permits to rock the cell for faster recombination and also put the cell in the correct position before the fluid volume measurement takes place. A video camera system records in real time the fluid phases while video tools enable the end-user to retrieve the volume of each phase versus pressure and temperature. A magnetic coupled stirrer mounted inside the sample chamber provides efficient fluid mixing and ensures fast equilibrium of sample phases. Homogeneous sample heating is provided by heating cartridges inserted in the cell body.

FEATURES

- Full visual PVT
- Pressure / volume: 10,000 psi (Visual model)
25,000 psi (High Pressure model)
- Maximum Temperature Range : Ambient to 190°C
- Temperature regulation : ± 0.2 °C
- Volume : 500 mL
- Visual volume: 500 mL
- Volume accuracy : 0.001 ml
- Temperature: +/- 0.1°C
- Pressure accuracy : 0.02% Full scale
- Power supply : 220 VAC, 50/60 Hz Accuracy on measurements:
- Pressure: 0.1 bar
- Liquid deposits: 0.005 mL

SPECIFICATION

The teaching PVT system should include:

- High pressure (up to 25,000 psi, High temperature ambient to 180°C) PVT cell.
- Automation and data acquisition software and processing system.
- Constant temperature control system.
- Magnetic Stirring system.
- Rotating cell system and rocking mechanism at any angle.
- Gasometer with GOR measurement system.
- Video camera system.
- Vacuum pump.
- Single phase 220 VAC 50/60 hz 10 A
- Measurements accuracy: Pressure 0.1 % - Temperature +/- 0.2 oC. Volume 0.005 ml
- Volume of PVT cell: 100 to 200 ml

APPLICATIONS

- Perform complete PVT study on oil and volatile oil; Constant Composition Expansion, Differential vaporisation at constant temperature, Separation tests (several stages at different temperatures).
- Perform complete PVT study on gas condensate with high GOR (Constant mass depletion and Constant volume depletion)
- Visual cell: Operator can visualise the production of condensates during gas condensates studies and monitor GOR during oil tests.
- Very high accuracy of phase detection.
- Mercury free equipment with H₂S resistant.
- Measure bubble or dew point and gas/liquid interface.

BENEFITS

- Constant temperature control system
- Motorized piston displacement pump
- Stirring by magnetic coupling
- Mercury free operation
- Embedded pump for precise pressure control and volume measurement
- Magnetic driven stirrer for rapid phase equilibrium
- High temperature pressure transducer with extreme accuracy
- Sub-ambient temperature control
- Automatic valves
- Control cabinet
- Calibrated pressure sensor and temperature sensor
- CCD digital video camera system
- Minimum dead volume
- Phase state processing software also available on request
- Cooling System available on request

SALES & SERVICES

Our sales team is dedicated to helping our customers find which machine is right for their situation. We also offer custom machines for customers with unique needs. To find out what we can do for you, contact us.

We are committed to customer support including specific service products, short response times & customer specific solutions. To quickly & flexibly meet our customer's requirement, we offer a comprehensive range of services.



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Disclaimer : Other specifications of this product are also available. Specifications subject to change without notice. Design subject to change without notice.

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