



CHANDLER
ENGINEERING

Model 3000

PVT PHASE BEHAVIOR SYSTEM

A Precision, Multi-Tasking Instrument For Understanding The Behavior Of Complex Mixtures

The study of thermo-physical properties of fluids such as phase behavior, density, viscosity, etc. under varying conditions of pressure, temperature and volume is commonly known as PVT studies. The Model 3000 PVT System is a precision instrument used to perform PVT studies on a variety of fluids with a special emphasis on those fluids typically encountered in petroleum reservoirs. Types of studies commonly conducted with a Model 3000 PVT System include:

- Oil Analysis / Recombined Fluid
- Oil Analysis / Capillary Viscosity
- Oil Analysis / Capillary Viscosity / Density
- Oil Analysis / Solids Detection
- Oil Analysis / Gas-Condensate Analysis
- Gas-Condensate / Low GOR
- Gas-Condensate / High GOR
- Chemical and Solvent Evaluation

Our PVT systems are mercury-free, more capable and easier to use. Computer-based data acquisition and control software makes it easy to set-up and perform PVT tests while electronically logging key test data.

Chandler Engineering's PVT products have been the world's leading line of PVT equipment since 1945. The Model 3000 PVT Phase Behavior System is the most widely accepted analytical (PVT) system in both domestic and international scientific laboratories.



FEATURES

- ✓ Mercury-Free Design
- ✓ Computer Controlled Data Logging
- ✓ Visual Phase Boundary Detection in Both Oil and Gas Condensate Studies
- ✓ Large Cell Volumes
- ✓ Flexible Configuration for Various Studies
- ✓ Optional Modules for Measuring Density, Viscosity and Solid Precipitation
- ✓ Designed for Operator Safety



Specifications

Maximum Operating Pressures

Pump Cell 15,000 psi / 104 MPa

Auxiliary Cell:

Gas Condensate Cell 20,000 psi / 138 MPa

Floating-Piston Cell 15,000 psi / 104 MPa

Mini Cell 15,000 psi / 104 MPa

Maximum Operating Temperature 400°F / 204°C

Pressure Accuracy 0.1 % of Full Scale

Cell Volumes (approximate)

Pump Cell 400 cm³

Gas Condensate Cell 1000 cm³

Floating-Piston Cell 600 or 1600 cm³

Mini Cell 100 cm³

Volume Accuracy 0.1 cm³

Liquid Condensate Volume Accuracy ± 0.01 cm³

Temperature Regulation ± 0.5°C

Environmental Requirements 60°F to 104°F / 15°C to 40°C

20% to 90% RH, non-condensing

Utilities

Power Requirements 220-240 VAC, 50/60 Hz, 1 phase,
25 A (6000 Watts) Max.

Physical Dimensions

Dimensions (wxdxh) 51 x 38 x 95 in. / 130 x 97 x 241 cm not including
external pump.

Shipping Information

Gross Weight approx.1350 lb / 610 kg, not including optional
modules or external equipment

Manufacturer's specifications subject to change without notice



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