

PVT HP/HT High Pressure High Temperature by





General Features

To take part in new developments initiated by oil companies, ST has designed and manufactured a PVT cell that can operate at high temperature (+ 300 °C). Thus, routine studies like CME or DV can be conducted. The larger viewing enables to study supercritical water, gas or solvents injection. This cell allows analysis of phenomena and parameters in EOR studies on very heavy oils.

Specifications	
Max. Working pressure	500 bar
Max. Working Temperature	Ambient to 300°C
PVT Cell Volume	2*20 ml
2 opposite pistons separated by a large viewing window Ø50x25	
Accuracy on measurements:	
Pressure	±0.25%
Temperature	±0.05°c
Volume	±10 ⁻⁴ ml





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Characteristics

- 2 opposite pistons separated by a large viewing window Ø50 x
- Special viewing window enables purge point and introduction point visualization
- Special high pressure gaskets on pistons
- Max. reduced dead volume
- 3 valves for introduction, purge and sampling
- Cell on rotating axis that makes possible to:
 - Completely return the cell to the vertical position
 - Stir sample by transfer from one chamber to another
 - Completely return the cell to the horizontal position for light and heavy phases sampling
- Long distance microscope, 1600x1200 pixels, 10 pixels = 1μ m
- High resolution camera with image acquisition software. Images can be replayed in video mode or frame by frame. The software enables to size different phases or emulsions.
- Falcon software for automation and data acquisition



Example of synoptic



