

Recombination Apparatus

Efficiently recombines fluids to specified GOR or bubblepoint

APPLICATION

- Recombination of separator or surface fluids to obtain recombined reservoir fluid

BENEFITS

- Reduced fluid preparation time and cost
- Near-zero dead volume

FEATURES

- Mixing ring and piston
- Bull's-eye window with viewing mirror
- Stainless-steel-covered "clamshell" heating jacket with temperature controller
- Electronic pressure transducer with readout
- Direct temperature measurement in cell through thermowell
- Self-energizing seal design
- Corrosion-resistant material

The recombination apparatus improves sample homogeneity (mixing) while reducing fluid preparation time and cost. Recombined petroleum fluid is obtained by transferring a known mass of separator oil and separator gas into the mercury-free high-pressure recombination cell according to a specified separator GOR or to a specific bubblepoint.

The recombination cell features a near-zero dead volume, efficient fluid-mixing piston, bull's-eye window, and viewing mirror.

This stand-alone system, mounted on a sturdy, compact, wheeled frame, is easily moved around the laboratory for use with multiple PVT systems. The recombination apparatus is equipped with a stainless-steel jacket, onboard heating control with temperature display, and digital pressure sensor with an LED readout.



Recombination apparatus.

Specifications†

Max. operating pressure, psi [MPa]	15,000 [103]
Max. operating temperature, degF [degC]	392 [200]
Cell volume, in ³ [cm ³]	146 [2,400] total 95 [1,560] with mixing piston
Material of construction	Hastelloy®
Connection	High Pressure Equipment Company AF2

† Optional configurations available