

Gas Hydrate Autoclave System

for research on gas hydrates and gas hydrate inhibitors



This system is able to analyse hydrate formation conditions for fluid systems containing natural gas, H₂S, CO₂, condensate or oil in the presence of water or brine.

The effectiveness of hydrate inhibiting chemicals can be examined, such as glycol, methanol and solutions containing electrolytes.

Maximum water vapor concentration can also be determined at pre-specified operating temperature and pressure condition.

Features:

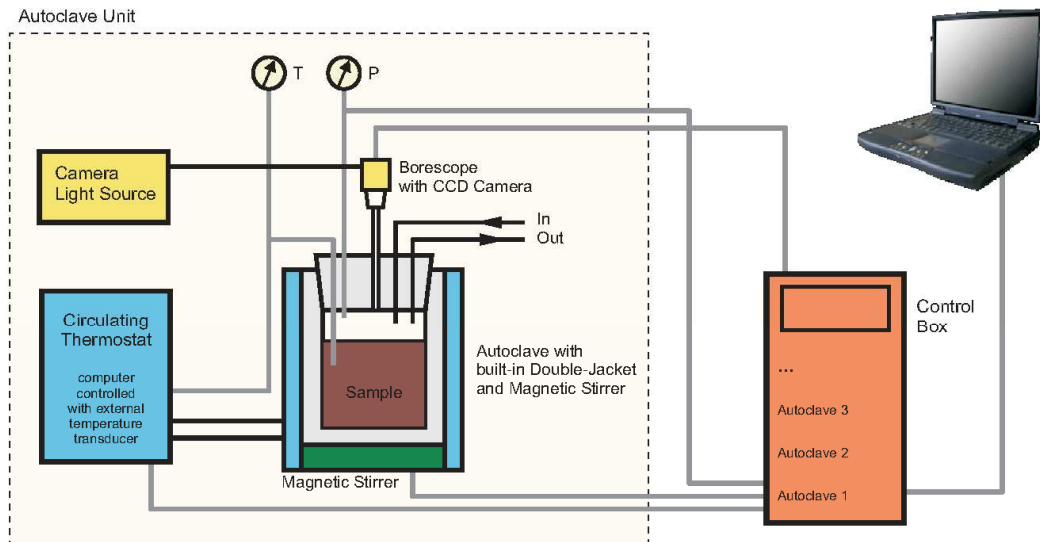
- Each autoclave unit has an integrated magnetic stirrer and integrated heating/cooling
- Up to 16 autoclave units and 4 cameras controllable by one PC for parallel tests
- Lid design with special thread, to be opened within seconds. Fast hydrate recovery from the autoclave
- Sapphire window for borescope camera. The window has a special design which avoids light reflections from the window's opposite side.
- 2 additional inlets/outlets, e.g. for GC sample retrieval or for inhibitor injection
- Maximum pressure 2,900 psi (200 bar), please contact us for higher pressures
- Temperature range -18 to +80 °C, please contact us for alternatives
- Automated videos and pictures on gas hydrate detection
- Modular design for easy upgrade to more units
- Long-time tests (more than 1 month) possible, brown-out protection
- Additional pressure displays on each autoclave available for fast indication

Applications:

- Gas hydrate generation for research
- Inhibiting chemical testing
- Parallel tests at varying chemical concentrations

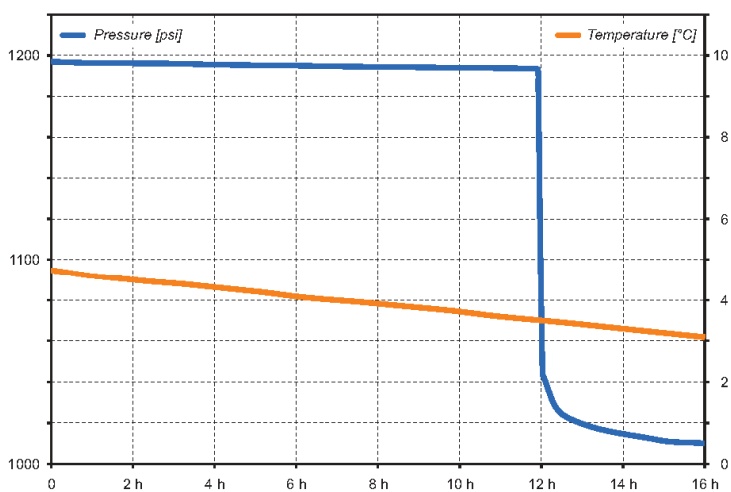
Options/Accessories:

- Alternative pressure and temperature ranges
- Torque measurement for indicating changes in viscosity
- Gas booster



Technical Data (1 Unit):

Pressure:	Max. 200 bar (2,900 psi), alternatives available
Temperature:	-18 °C to +80 °C, alternatives available
Stirrer:	100 to 1,000 rpm, alternatives available torque measurement optional
Required Desk Space:	approx. 80 x 60 cm, incl. PC screen
Weight:	approx. 42 kg
Power Consumption:	1850 W max.



*Typical Pressure/
Temperature Chart:
Hydrates start to form
at a certain temperature,
which results in a sudden
pressure decrease.*