

Wax Loop

For the automatic wax deposition potential determination

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Field production of waxy crude oil or condensate may face serious operating problems due to the crystallisation of the paraffin components of the product fluids, particularly in offshore conditions. The build-up of deposits at the wall of a pipe results in reduced production rates and ultimately complete shut-down.

The Wax Loop brings the examination of paraffin deposition effects in tubing and pipelines onto your lab desk.

The heated sample is pumped through a cooled test tube. Differential pressure and temperature monitoring over this test tube allow a very accurate determination of the wax deposit developing at the tube's inner wall.

Small sample volumes and short heating/cooling periods let you process your tests fast. The control software makes the Wax Loop a completely automated instrument.

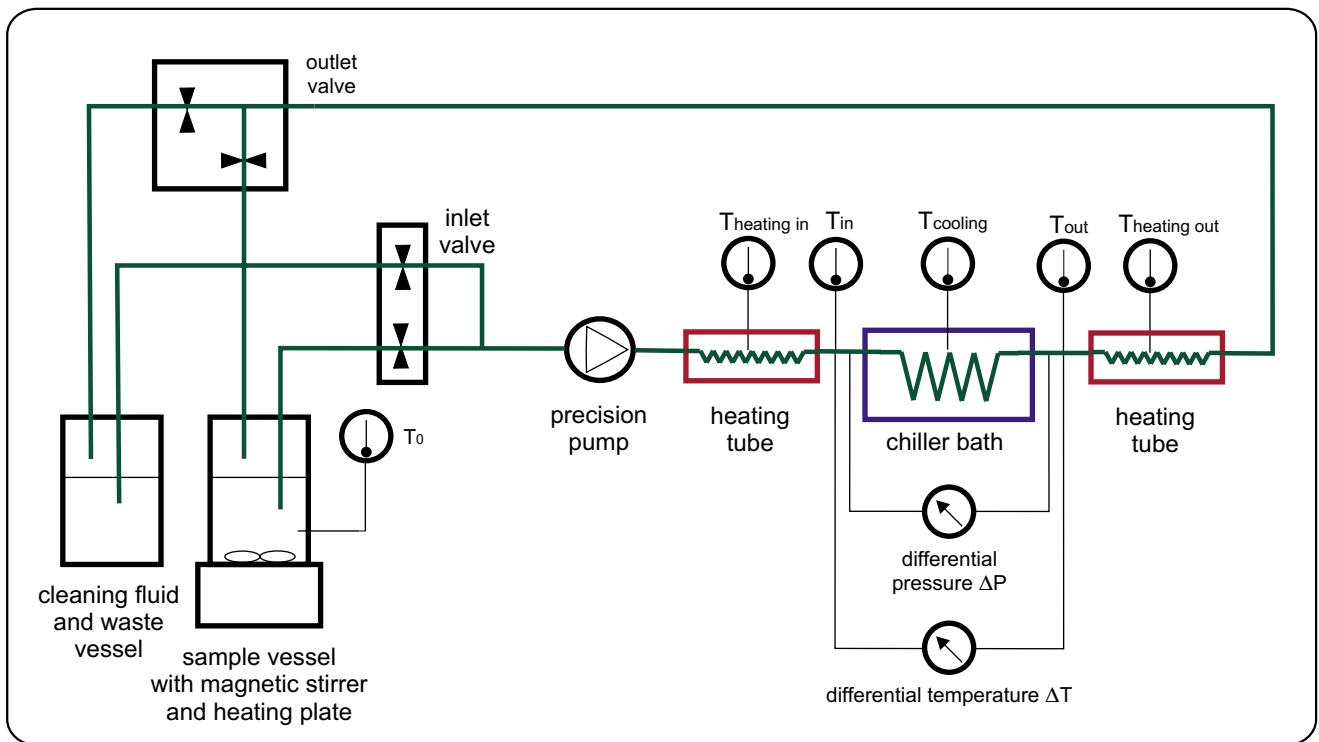
With the PSL Wax Loop, research on wax deposition inhibitor chemicals as well as quality control becomes fast, accurate and reliable.

Application:

- Examination of wax deposition effects
- Development and optimization of inhibitor chemicals
- Quality control

Characteristics:

- Fully automated
- Open and closed loop tests
- Shock cooling for maximum wax deposition effect
- Compact dimension



Wax Loop Schematic

Technical Data:

Temperature range:	-10 °C to +80 °C (inlet +5 °C to +80 °C, preheating 300 °C max.)
Temperature measurement:	Pt100 / thermocouple, accuracy 0.1°C
Pressure range:	0 to 5 bar
Pressure measurement:	Piezo resistive, accuracy 0.05% FS
Pump type:	diaphragm pump
Flow rate:	0.03 to 30 ml/min, reproducibility ±1%
Stirrer speed:	100 to 2000 rpm
Test tube:	Stainless steel, inner diameter 2.0 mm
Control and automation:	PC/SPS full automated computer control, Windows 2000
Power consumption:	230 VAC, 2.9 kW max
Dimension (WxHxD):	81 x 65 x 65 cm (+ Chiller 23 x 36 x 38 cm)
Weight:	46 kg (+ Chiller 26 kg)