

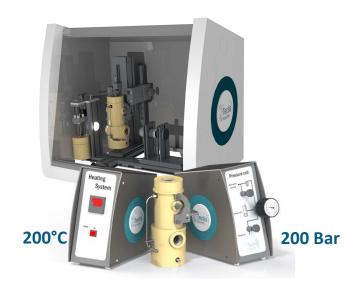
## TRACKER™ HIGH PRESSURE

designed to characterize surface & interfacial properties in demanding conditions

## TRACKER™ H - Pressure Cell 200bar



**TRACKER™H** is standard automatic drop Tensiometer, equipped with a removable pressure cell that allows to measure superficial/interfacial tension and contact angle up to 200 bar and 200°C.



The pressure cell is easily attached to the TRACKER™. It encloses the syringe and the cuvette for handling the sample under a controlled atmosphere.

TRACKER™H is designed to measure gas/liquid or liquid/liquid or solid/liquid interfaces with both configurations, pendant drop or rising drop. Thanks to the rotative platform, several drops can be successively placed on or beneath a solid to make several contact angle measurements under pressure without opening the pressure cell.

The syringe piston is accessible from outside the cell and can be automatically controlled. The cell is connected to a pressure network, a gas cylinder or a compressor via the gas control box.

A separated thermocouple measures temperature of liquid inside the cell. Temperature control is driven by using an external circulating bath or electric resistances. A control unit supplies power to electrical heaters and displays set and actual temperature of the environmental chamber jacket.

The module has been designed to be easily dismantled for cleaning.

Drop shape analysis is made through sapphire windows. Both temperature and pressure parameters as well as measurement set up are controlled by the software. Data are calculated in real time.



Measuring devices

## Data & Measurements

- Surface Tension (liquid/gas)
- Interfacial Tension (liquid/liquid)
- Contact angle & Surface Energy (liquid/solid)
- Advancing and receding Contact angle
- Interfacial rheology Viscoelastic modulus
- Coefficient of rigidity
- Temperature / Pressure

## **Applications**

- Supercritical CO<sup>2</sup>
- Petroleum, bitumen experiments
- Smelt polymer
- Contact angle under pressure
- Compatible with methane

Technical specifications	
Pressure / T°	Up to 200bar / 200°C
Gas	Supercritical CO², nitrogen, argon, air, CO₂
Connectors	Stainless steel tube ( 1/8"OD, 1m length) to connect pressure cell to the gas box