

Pilot Units for Supercritical Fluid Extraction of Solids

| Standard Design | | Options |
|----------------------------|---------|------------------------|
| Max. operating pressure | 300 bar | 500, 700 bar |
| Max. operating temperature | 80°C | 120, 150, 200°C |
| CO ₂ flow | 18 l/h | 10, 30, 50, 100 l/h |
| Extractor capacity | 1 litre | 2, 4, 6, 10, 20 litres |

Selective separation of valuable thermolabile components from solid and liquid raw materials using a supercritical gas as solvent.

Advantages

- Low-temperature separation produces natural extracts
- Chemically inert and non-toxic solvents leave no residue in the extract
- Solubility variation achieved by changing extraction pressure and temperature
- High selectivity and diffusion rate

Features

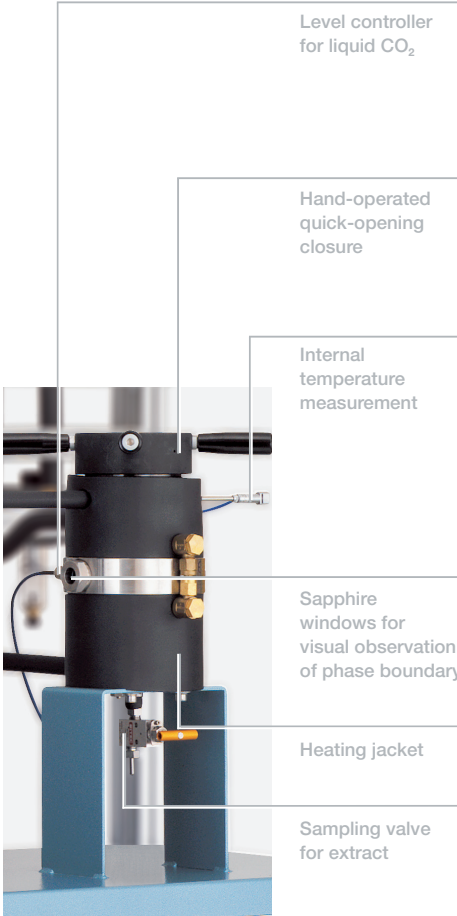
- Closed CO₂ cycle
- Contaminant-free recirculation of supercritical solvent
- High-performance separation step
- Hand-operated quick-opening closures
- Continuous process with liquid raw materials

Options

- Fractionated separation with fluid cyclone
- Fractionated extraction
- Modifier system
- Multivessel design
- Preparation for retrofit with additional extractors, separators, etc.
- Data acquisition system
- Process control and batch documentation with programmable logic controller (PLC)



Modular SFE pilot unit built for 500 bar max. operating pressure designed for pharmaceutical research (Germany). The system includes the options fractionated separation, modifier system and Coriolis mass flowmeter.



Sophisticated final separator with controlled liquid CO₂ level for the prevention of aerosol forming.