Multi-Purpose Pilot Units for Supercritical Fluid Extraction of Liquids and 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
Column interior diameter	Ø 38 mm	Ø 50, 65, 90 mm
Column internal length	2 m	3, 4, 5 m
Liquid capacity	2 l/h	4, 10, 18 l/h

Option «Fractionated Separation» with high-performance fluid cyclone. Collecting basket is equipped with a lifting device for easy handling.

Applications with solid raw material

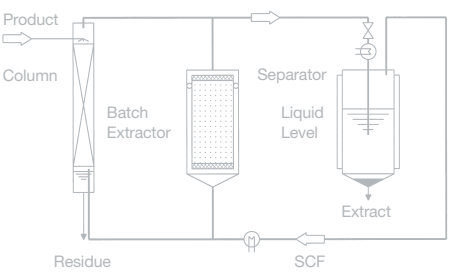
- Production of natural extracts, e.g. hops, caffeine, spices
- Production of active agents for pharmaceuticals and cosmetics
- Degreasing of catalysts, microchips, medical implants
- Extraction of monomers from polymers
- Production of essential oils from blossoms, leaves and roots
- Regeneration of molecular sieves
- Decontamination of soils
- Production of natural colours e.g. oleoresins, carotene, bixins
- Conservation of antique books or wooden sculptures

Applications with liquid raw material

- Fractionated separation of oils and waxes
- Separation of polyunsaturated fatty acids (PUFAs)
- Removal of cholesterol from dairy products
- Refining of lecithin
- Non-alcoholic wine and beer

Related applications

- Impregnation of textiles and wood products
- Dying of textile fibres
- Tobacco expansion



Simplified process flow diagram for multi-purpose supercritical extraction pilot unit with closed CO_2 cycle.

Multi-purpose SFE pilot unit for solid and liquid raw materials built for 500 bar max. operating conditions designed for research (Russia). The system includes the options fractionated separation with fluid cyclone, modifier system and Coriolis mass flowmeter.