

SUPERCRITICAL FLUID EXTRACTION SYSTEM
FOR LABORATORY SCALE

100 ml
500 ml
1⁺
2⁺

Extraction

Loading capacity **2 L net**
Extractor volume **2,7 L**
Max pressure **700 / 1000 bar**
Max temperature **100 °C**

Separation

Capacity **300 ml**
Max pressure **200 bar**
Max temperature **100 °C**

Independent pressure and temperature control
allows extract fractionation

SPECIFICATIONS

Technical information

CO₂ flow : **100 gr/min at 700 bar**
70 gr/min at 1000 bar
Co-solvent flow : **25 ml/min**

CO₂ recycling

High recycling efficiency thanks to our
innovations.
Estimated 10 % CO₂ loss during collection.

Dimensions

L 1 500 x W 850 x H 1 500 mm

Weight

Between **350 kg & 450 kg***

**depending on options selected*



Co-solvent pump

- > Boost and increase your CO₂ extraction by injecting a 2nd solvent into the CO₂ stream while the extraction is running
- > Allows an easy cleaning of the machine
- > Included in the standard equipment

Innovative CO₂ piston pump

- > Flowrate is automatically controlled with a frequency drive and an integrated flow controller
- > Use of a coriolis flowmeter

Technical data / installation requirements

Process fluid	Liquid CO ₂ deep pipe cylinder stored at room temperature 1/8" OD pipe
Power	Equipment : single-phase / 230 V / 50 Hz / 32 A Chiller : 1Ph + N + G / 230 V / 50 Hz / 11 A 2600 W
Cooling source	A water chiller is already connected to the skid and supplied into the equipment
Air pressure	@7,5 bar - oil free (not supplied)

State-of-the-art design and technology

All our systems are CE marked for Europe according to the PED/2014/68/UE norm.
Our systems can be adapted to international standards : ASME, UKCA...

In addition to our standard version, we offer 2 levels of certification :
GMP ready **or** Full GMP 21 CFR Part 11.



Examples of options available :

- > Additional basket(s) with adaptable capacity
- > Additional separator(s) (heated or cold trap) or sapphire
- > Stirrer
- > SAS, RESS, PGSS configuration
- > Fractionation column skid
- > Automatic BPR
- > Ultrasound probe
- > Basket rotation...

Innovation at the core of your process



Plug & Play

Easy to install, start up and use
User friendly system



Compact

Minimum footprint
Easy access to all components



PLC control

User friendly control panel, multiple connections for remote control
No computer obsolescence



Service & support

Reliable service and expert support
Installation, commissioning, training, maintenance, scale up



Modular, Mix & Match system

Expandable capacities (possibility to add extractors) and flexible skids



SIEMENS



Premium equipment

High standards
Safe technology, secured parameters and data recording

Contact the SFE Process team
for a custom-made solution :
sales@sfe-process.com

SFE
PROCESS
EXTRACTION