

SUPERCRITICAL FLUID EXTRACTION SYSTEM  
FOR LABORATORY SCALE

100 ml  
500 ml  
1<sup>+</sup>  
2<sup>+</sup>

### Extraction

Loading capacity **1 L net**  
Extractor volume **1,6 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

CO<sub>2</sub> flow : **100 gr/min at 700 bar**  
**70 gr/min at 1000 bar**  
Co-solvent flow : **25 ml/min**

### CO<sub>2</sub> recycling

High recycling efficiency thanks to our  
innovations.  
Estimated 10 % CO<sub>2</sub> 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 CO<sub>2</sub> extraction by injecting a 2<sup>nd</sup> solvent into the CO<sub>2</sub> stream while the extraction is running
- > Allows an easy cleaning of the machine
- > Included in the standard equipment

### Innovative CO<sub>2</sub> piston pump

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

## Technical data / installation requirements

<b>Process fluid</b>	Liquid CO <sub>2</sub> deep pipe cylinder stored at room temperature 1/8" OD pipe
<b>Power</b>	Equipment : single-phase / 230 V / 50 Hz / 20 A Chiller : 1Ph + N + G / 230 V / 50 Hz / 11 A 2600 W
<b>Cooling source</b>	A water chiller is already connected to the skid and supplied into the equipment
<b>Air pressure</b>	@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](mailto:sales@sfe-process.com)

**SFE**  
PROCESS  
EXTRACTION