**SFE PROD 2x20+**

**Supercritical Fluid Extraction System for Production Scale**

### Extraction
- **Loading capacity**: 2 x 20L net
- **Extractor volume**: 2 x 22.4L
- **CO₂ flowrate**: 100 kg/h
- **Max pressure**: 400 bar
- **Max temperature**: 100°C

### Separation
- **Capacity**: 2 x 5L heated
- **1 x 3L cold trap**
- **Max pressure**: 200 bar
- **Max temperature**: 100°C

- Independent pressure and temperature control allows extract fractionation

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**STANDARD RANGE**

- **We always talk about effective loading capacity, not about the volume of the extractor**

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**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

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**Plug & Play**
- Easy to install, start up and use
- User friendly system

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**100% automated process**
- Fully automated extract collection, valves, vessel switching, data recording...
- Preset recipes
- Operator free: all you need to do is press the start button!

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

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**Continuous production**
- No time loss: possibility to load another basket while extraction is going on

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**Modular, Mix & Match system**
- Expandable capacities (possibility to add extractors) and flexible skids
- Xtramile optimisation (contact us for customised process optimisation)

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**Service & support**
- Reliable service and expert support
- Installation, commissioning, training, maintenance, scale up

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**Premium equipment**
- High standards
- Safe technology, secured parameters and data recording

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**Compact**
- Minimum footprint
- Easy access to all components
Technical data / installation requirements

**Process fluid**
Liquid CO₂, deep pipe cylinder stored at room temperature
1/4” OD pipe

**Power**
Equipment: 3-phase / 400V / 50Hz / 32A
Chiller: 3-phase / 400V / 16A circuit-breaker / 53A starting current / 63A electrical protection recommended
Overhead crane: single-phase / 230V / 32A directly plugged into and powered by the equipment

**Vent line**
1/2” OD pipe

**Cooling source**
A water chiller, supplied by SFE Process must also be connected to the skid with two 3/4” tubes.
The chiller can be placed next to the system, outside or in a adjacent ventilated room.

**Air pressure**
67.5 bar - oil free (not supplied)

**Dimensions**
Complete solution: L 2056 x W 2310 x H 2295 mm
Equipment: L 1820 x W 1040 x H 1011 mm | Chiller: L 760 x W 760 x H 1335 mm

**Weight**
Equipment: 1750 kg | Chiller: 160 kg

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, CRN...

4 versions available: + Standard + GMP ready + full GMP + 21 CFR PART 11

Examples of performance achieved by our customers using a SFE Prod 2x20+

<table>
<thead>
<tr>
<th>With our SFE Prod 2x20*</th>
<th>Cannabis extraction</th>
<th>Vanilla extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedstock processed per extraction</td>
<td>2 x 6 kg</td>
<td>2 x 1 kg</td>
</tr>
<tr>
<td>Duration of a full extraction</td>
<td>4 hours</td>
<td>1.5 hours</td>
</tr>
<tr>
<td>Feedstock processed over 24h</td>
<td>up to 72 kg</td>
<td>up to 32 kg</td>
</tr>
<tr>
<td>Feedstock processed over a year*</td>
<td>up to 17 280 kg</td>
<td>up to 7 680 kg</td>
</tr>
</tbody>
</table>

*Calculated on a 24h/day, 240 days/year operation basis

100% of your valuable compounds is extracted

CDB concentration of your plant

<table>
<thead>
<tr>
<th>5%</th>
<th>10%</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>844 kg</td>
<td>1 728 kg</td>
<td>2 592 kg</td>
</tr>
</tbody>
</table>

Quantity of oil / year

<table>
<thead>
<tr>
<th>1 phase – 6 to 7%</th>
<th>Multiphase – 25 to 26%</th>
<th>Complete vanilla oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 920 to 1 997 kg</td>
<td>441 to 538 kg</td>
<td>1 920 to 1 997 kg</td>
</tr>
</tbody>
</table>

Quantity of oil / year

Please contact our experts for a custom-made solution!

Jérémie LAGRUE | Founder & CEO
jlagruel@sfe-process.com | +33 6 13 90 17 54

Brice SARRAIL | Managing Director & CTO
bsarrail@sfe-process.com | +33 6 71 32 95 17

Romain DA COSTA | International Sales Manager
rdacosta@sfe-process.com | +33 7 66 46 99 00

Leading designer of innovative supercritical CO₂ solutions