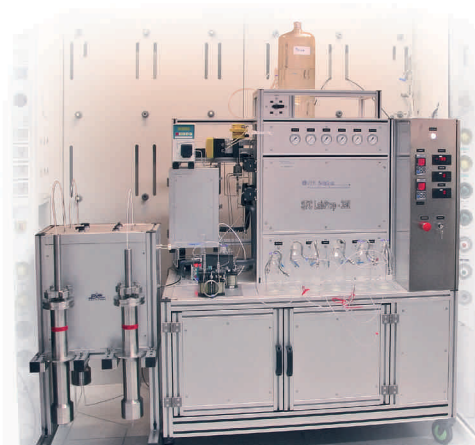


New Prep SFC Station **SFC-PICLAB PREP Series**

The **SFC-PICLAB PREP Series** are state of the art preparative Supercritical Fluid Chromatography systems using CO₂ as the main eluent in order to perform chiral and non chiral separations.

The use of CO₂ in preparative chromatography results in faster separation, less solvent consumption and more concentrated fractions compared to liquid chromatography.



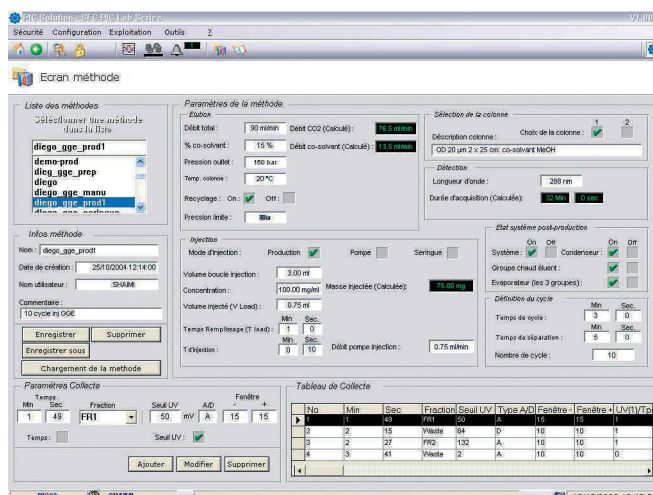
System Specifications

	SFC-PICLAB PREP 150	SFC-PICLAB PREP 350	SFC-PICLAB PREP 600	SFC-PICLAB PREP 1000
Production Capacity	5-30 g/day	30-100 g/day	50-300 g/day	100-1000 g/day
Max Flow rate	150 ml/min	350 ml/min	600 ml/min	1000 ml/min
Column Size	20 and 30 mm I.D	20 to 50 mm I.D	50 and 75 mm I.D	75 mm I.D
Column Switching valve	Yes	Yes	Yes	Yes
Co-Solvent	Up to 4 columns	Up to 4 columns	Up to 4 columns	Up to 4 columns
Modifier	Max 50 ml/min	Max 100 ml/min	Max 250 ml/min	Max 500 ml/min
Switching valve	Yes	Yes	Yes	Yes
Max Pressure	Up to 6 solvents	Up to 6 solvents	Up to 6 solvents	Up to 6 solvents
Temperature	300 bar	250 bar	300 bar	300 bar
Collection	15 to 70 °C	15 to 70 °C	15 to 70°C	15 to 70°C
CO ₂ recycling	4 to 6 fractions	4 to 6 fractions	4 to 6 fractions	4 to 6 fractions
Recovery Yield	Yes	Yes	Yes	Yes
Dimensions (cm)	> 95%	> 95%	> 95%	> 95%
155(l) x 80(w) x 175(h)				

Larger SFC systems are available on demand

Control Software

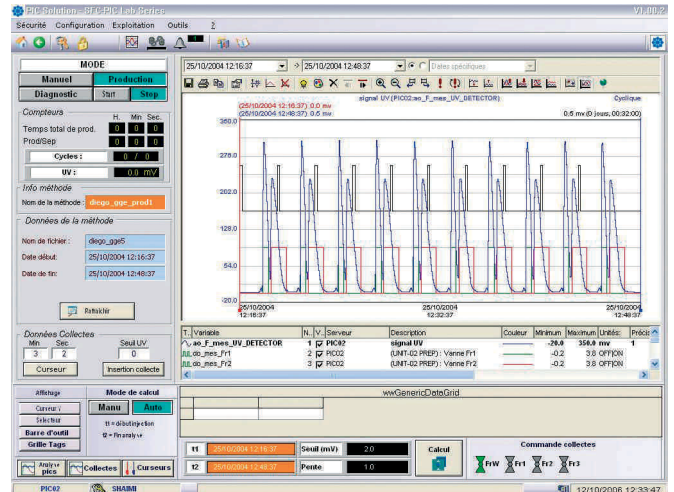
- Intuitive control software developed by experienced chromatographers.
- PLC (Programmable Logic Controller) for process control results in more reliability.
- Manual control from the flow sheet diagram or Automatic operation by loading method containing all separation parameters.
- Method assistance builder makes it easy to create a production method.
- Data acquisition and processing.
- Automatic separation report generated for notebook records.



Automatic Injections and Fraction Collection

- Stacking injection mode for optimum productivity.
- Single injection by pump or syringe for cycle time and fraction collection determination.
- Transfer by a simple click your single injection in stacked injection for production of grams to Kg of sample.
- Automatic fraction collection based on time and UV threshold.

Chiral Production in stacked injections mode with automatic collection for peak 1 and Peak 2. Injections of 75 mg of sample on CHIRALCEL OD column 2 x 25 cm (i.d x L) are made every 3 min. Events for fraction collection and injection are displayed of the chromatogram.



Our Process Advantages

Proprietary CO2 Recycling

- Highly efficient gas-liquid separator: Sample recovery > 95%
- 85 to 90% CO2 recycled in-line after cleaning
- Automatic adjustment of modifier ratio in the eluent to maintain retention time stability
- Avoid concentrating eluent impurities by recycling CO2

Preparative Column Selector

- Four Preparative columns (50 to 75 mm I.D) mounted on a small mobile skid (55 x 60 cm foot print). You can select the desired column by simply pressing a button.
- Time saving: No need to unpack and repack a column for a new project. Columns are connected and ready to be used.
- Increase column life time: No more depressurisation/pressurisation that occurred during packing/unpacking procedure.

Proprietary Modifier Addition

- Modifier addition at the same constant pressure independent of operating conditions.
- More reliable because the modifier pump works always at the same pressure.
- Better reproducibility of modifier ratio from a separation to another.

Intelligent CO2 Supply to Run Unattended 24h/day.

- Automatic CO2 change-Over system to allow 24 hours operation.
- Pumping of the CO2 gas phase containing less impurities compared to liquid phase
- No need for special CO2 supply system. Standard commercial CO2 tanks (30-35 Kg) are used to feed the system.

A Safe Process.

- Pressure and temperature switches independent of software stop process in case of high alarm, even in case of computer shutdown.
- Process alarms are managed by the PLC for more reliability.
- Mechanical safety valves at different locations of the process.
- Pressure limits can be set by operator from the software when it is needed.

