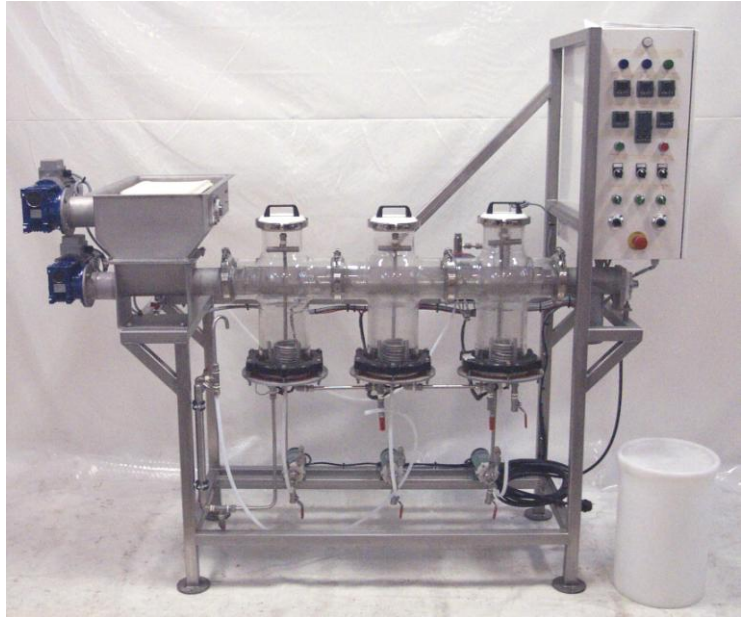


GPC EX3

Solid-liquid continuous extraction

DESCRIPTION

- This unit provides a way of separating some of the components of a heterogeneous solid using an appropriate liquid solvent.
- It is possible to follow and analyse a continuous extraction process, controlling it by adjusting various parameters (Revolution velocity of the screw, mixture temperature...)
- A thermoregulator with pressurized water allows the unit to operate automatically.
- A user manual is provided.
- Possible studies : percolation, infusion, maceration, extraction.
Examples : extraction of mint or lavender.

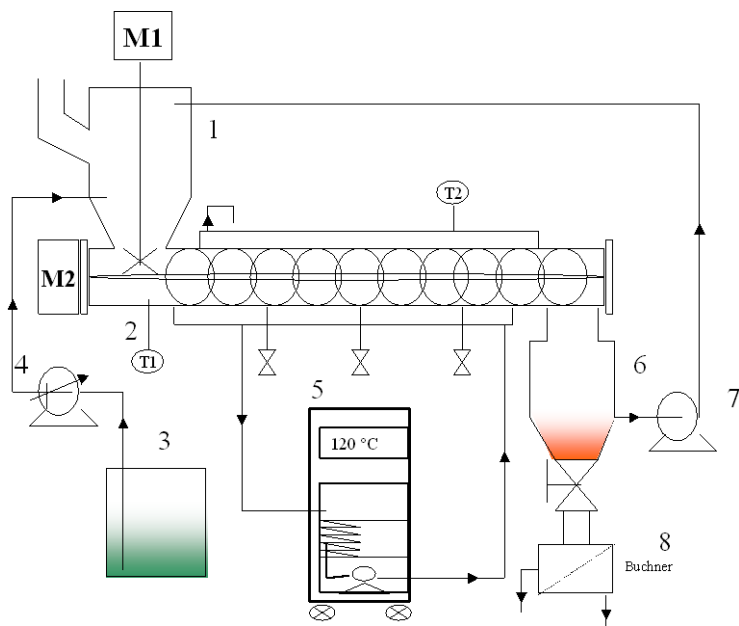


SUGGESTED APPLICATIONS

- Study of a process
- Thermal and matter balances
- Determination of the coefficients of thermal transmissions
- Efficiency
- Residence time

GPC EX3

DESCRIPTION



1 – Feeding hopper

- PVC

M1 – Agitation motor

- P = 75 W – 40-1200 R.P.M. – inox shaft
- Turning : helix

M2+2 – Endless extracting screw

- PTFE

2 – Extractor

- Borosilicate glass – double-walled
- Length : 1 m
- 3 sampling openings
- 2 Pt 100 temperature calliper

3 – Supply tank for the solvent

- Volume 20 L

4 – Diaphragm pump

- Polypropylene head
- 15 L/h electronic at 7 bar (100 psi)
- 220 V single-phase – 50 Hz

5 – Thermoregulator – 6 kW

- Tmax : 120°C
- With cooling exchanger
- 220-240 VAC – 60 Hz – 30 A
- PID regulation on the command board

6 – Extract Receiver

- Borosilicate glass – 20 l

7 – Solvent recycling pump

- Centrifugal type 0.37 kW
- Stainless steel body and propellers
- Flow rate 40-400L/h

8 –Buchner filter

- continuous filtration
- stainless steel 316 L – volume 5 L

OPTION

Heating by microwave (high efficiency of extraction with a direct heating of the solid)

UTILITIES

Electricity : 230 V – 35 A

Network water

Evacuation

DIMENSIONS

Length : 2 000 mm

Width : 800 mm

Height : 1 500 mm

TEMPERATURE MEASUREMENTS

T1, T2, T3 : PT 100 probes

C1, C2, C3, C4 : Conductivity

Measuring cell : 0.04 to 200 µs/h