



5000 psi 5L x 5L

Basic Specs: Model # 5L1602FA

System description: Closed loop system for transport of CO₂ from gaseous state to liquid state to supercritical fluid state.

Height of unit: 7 feet

Approximate floor space required: 8' x 5'

Extraction vessel size: 5 Liter

Number of extraction vessels: 2

Separator vessel size: 2.5 Liter

Number of separator vessels: 2

Additional water separator: 1

Flow rate: 30 liters per hour

Cycle run time: 90 minutes

Lead time until shipment: 12 weeks

Estimated ship time: 3 to 5 weeks

Estimated time for set up: 3 days



Sell Sheet CO₂ Extraction Plant

PO Box 353 Bloomfield, IN 47424 | Phone 812-762-4400

Description:

The system consists of two extraction vessels of equal capacity which are equipped with safety closures. The salient features of this supercritical fluid extraction plant are:

1. System designed to meet cGMP.
2. Extraction vessel designed with safety closures and special seals suitable for CO₂ duty and quick closures for separator vessels.
3. Modular steel frame for mounting of extraction vessels and all peripherals including controls.
4. Maximum operating pressure for extractors is 350 bar (5076 psi) and maximum temperature is 55C.
5. Maximum operating pressure for separator #1 is 130 bar (1885 psi) and 70 bar (1015 psi) for separator #2.
6. Additional water separator to trap the higher notes, and the most elusive terpenes.
7. All contact parts are SS 316, noncontact parts are SS 306 and the supporting structure is SS 306 or MS with epoxy coat.
8. Easy to use SCADA system with semiautomatic and manual mode options.
9. System logs all data electronically for analysis.
10. Recycling of CO₂ for environmental and fiscal conservation.
11. Two stage safety with interlocked electronic controls and second stage mechanical safety.
12. High technology pressure regulation system consisting of servo controlled automated back pressure regulator.
13. Specially developed motorized and metering CO₂ pump with controls for variable pressure and flow rate control.

Double Production Output | Cut Operational Cost By Half[†]

Cycle time per 5L vessel – **90 minutes**

CO₂ recovery & material reload time – **30 minutes**

Estimated processing capacity per vessel – **1600 gm (3.5 lb)**

Runs per day – **12**

Total estimated raw material processed per day – **19,200 gm (42 lb)**

Daily Maintenance cost (average) – **\$10**

Daily electrical use – **100 kWh**

Estimated electricity cost (\$0.18 per kWh) – **\$18**

CO₂ cost (\$1 per lb) – **\$36**

Total estimated daily operational cost – **\$64**

[†] Double production and half operational cost are as compared to a national competitor based on their published ROI data. All figures are assuming normal and standard operating conditions, differences in material, conditions or operational parameters may change output, timing and cost.