

PURE EXTRACTION



SuperCritical CO2 Extraction Systems

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Benefits of CO2

Traditional methods of extraction include solvent extraction, distillation, and cold pressing. These methods of extraction can have varying degrees on the quality of the final product or extract.

Subcritical and Supercritical Fluid Extraction utilizing high pressure Carbon Dioxide extracts the essential oils from botanicals through specific temperatures and pressures.



Non-Toxic/ Non-Carcinogenic: the extracted oil does not contain any residual petroleum particles.



Safe: no potentially flammable or explosive petroleum based solvents, approved method by FDA.



Carbon-Neutral/ Environmentally Friendly: does not contribute toward carbon emission increases in our atmosphere.



Tunable Solvent: by varying and fine tuning the temperature, pressure, and the flow rate during the extraction process, multiple varieties of the end product can be produced.



Producing a Premium Product: known as the highest quality oil extracts from products such as coffee, vanilla, tea, fruit and nut extracts and aromas, omega-3 oil, perfumes, tobacco extractions for e-cigarettes, and of course for superior high grade cannabis oil.

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At Pure Extraction we are committed to the innovation, quality manufacturing, and client partnerships.

We specialize in the design, development, manufacturing, and continued innovation of SuperCritical CO2 Extraction Systems.

We partner with our clients to achieve the best quality end-product result through continued consultation during the pre-extraction, extraction, and post-extraction processing stages.

Benefits of PURE

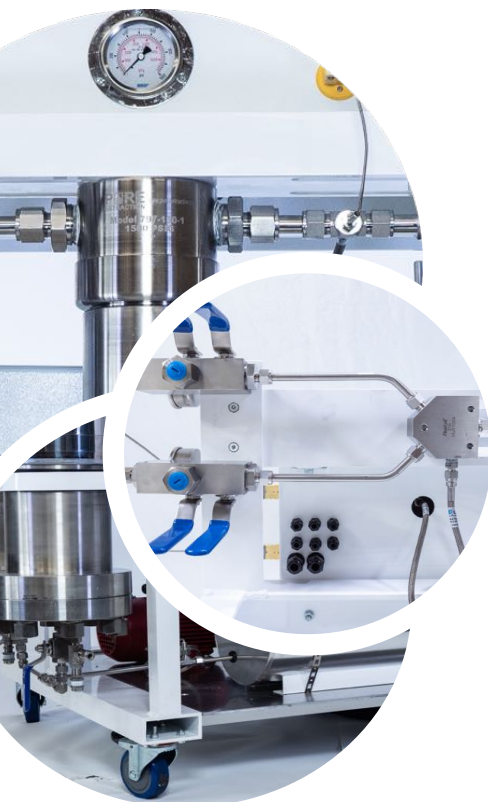


Scalable. Pure Extraction systems range from entry-level to mid-level in size, with production scale options, but all of our quality systems are designed to be scalable to the demand of the clients. Just as the market grows and develops, so do the demands of our clients.



a) **Scalable Systems:** Our 2.5L systems can be upgraded to a 5.0L system without the need for an entire new build. Additionally, each system can be made to suit your budget, such as semi-automated and automated options. As you grow - we grow with you.

b) **Scalable Extraction Room solution (SERver):** for the fastest/ high volume extraction requirements our “server room” extraction set-up is the best option. In addition to being cost efficient and flexible, other benefits are outlined in the SERver section of this brochure.

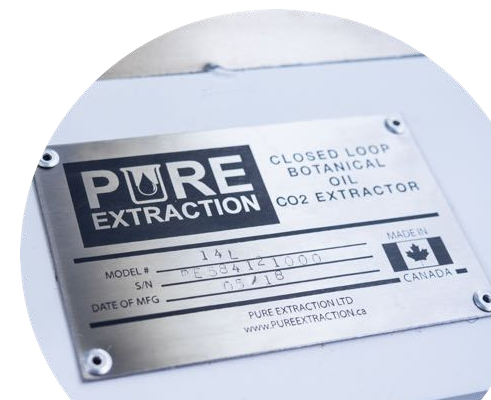


Modular. All systems are designed with the operator in mind. Ease-of-Use and maintenance are key elements in any system. At Pure, our systems use the highest level in connection technologies to ensure all sub-components can be removed, cleaned, and reinstalled easily. Ensuring your final product is of the highest of quality through components that ensure easy removal and cleaning.

High Efficiency. At Pure we recognize that more travel the fluids require, the more chance residual oil will be left in the system. Our systems are designed with custom machined sub-components which reduce the overall footprint, reduce the overall cost, and reduces the amount of potentially costly residual oil.

Mobile. Another benefit to a compact quality built system is the benefit of mobility. Pure systems are built with the ability of mobility in mind. All systems are self-contained and on wheels to allow transport to different on-site locations.

Partnership Support. At Pure we have a Client Support system second to none. In addition to our support app, our partnership perspective provides the framework of our ongoing support. All systems are welded, manufactured, and assembled in Canada.



Server Room Benefits



Fastest Extraction Solution. Server Room production set-ups provide the fastest per pound botanical solution in a weight to weight comparison to larger single-machine systems. See our Technical Specifications

Higher Safety/ High Convenience.

Safety: no "middle of the night" extraction issues. High volume can be done within a business day.

Continuous Extraction

Staggering the start time for each extractor will allow for 24 hour continuous extraction. Isolated/ independent machine maintenance and cleaning can be accomplished rather than a full production shut down.

Cost Effective

Pure SERVER Room Solutions are more cost effective and efficient than larger, single extractor set-ups. Additionally, affordability is built into our scalability, your cost build only as the demand increases and additional production requirements are needed.

Redundancy

Similar to other "server rooms" there is always a functional back-up in the event of any issue or during routine maintenance.

Purer End Product

Rather than using the same machine for different botanicals and different strains, separate machines can be dedicated for isolated extraction purposes. This provides a more flexible production set-up.

With dedicated machines per botanical there is less chance of cross-mixing of botanicals and strains.

Technical Specifications



Extraction System

- Liquid CO2 pump and Solid State Heating
- Two-Stage Separation
- Dual Extraction Vessel Design for Continuous Use Operation
- Pre-heater for CO2 Temperature Control
- Modular and Quick Release Connector
- Custom High Efficiency Sub-Components

Weight: ~1000lbs

Electrical: 230VAC/ 60AMP
or 3Phase 208-46VAC

**Note: Chiller not pictured

Closed Loop

- CO2 Recycling System
- Includes: Heat Exchangers, Storage Vessels, Glycol Chiller, and Peripherals

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Automation

- Semi-Automated: automated safety features, manual temperature and pressure controls.
- Automated: Preset Programs, Temperature/ Pressure data-logging, lock-out password enabled, connectivity for email/txt notifications and remote diagnostics.



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Lab/ Pilot System:	OPTIONS				CAPACITY				MSRP* (USD)	
	Vessel Capacity	Loop (Open/ Closed)	PSI	Dual Vessel/ Continuous Run	LBS per Run MIN	LBS per Run MAX	Run Time MAX Capacity <small>(based on minimum run time/ batch)</small>	LBS in 10 Hour Day <small>(based on minimum run time/ batch)</small>	Semi-Automated	Automated
PE-CO2-2.5L-O	2.5L	O	2000	No	1	1	1	10 (10 runs)	33,000	
PE-CO2-2.5L-C	2.5L	C	2000	No	1	1	1	10 (10 runs)	50,000	65,000
PE-CO2-2.5L-C-3K	2.5L	C	3000	No	1	1	1	10 (10 runs)	58,000	73,000
PE-CO2-5.0L-C-3K	5.0L	C	3000	Yes	1	2	2	10 (5 runs)	72,000	87,000
PE-CO2-10.0L-C-3K	10.0L	C	3000	Yes	2	5	5	10 (2 runs)	105,000	120,000
PE-CO2-20.0L-C-3K	20.0L	C	3000	Yes	5	10	10	10 (1 run)	120,000	135,000
M-Production:										
PE-CO2-20.0L-3K-10SERver	20.0L	C	3000	Yes	2	10	5	20 (2 runs)	195,000	222,000
PE-CO2-30.0L-3K-10SERver	30.0L	C	3000	Yes	2	15	5	30 (2 runs)	285,000	325,000
PE-CO2-40.0L-3K-10SERver	40.0L	C	3000	Yes	2	20	5	40 (2 runs)	365,000	416,000
L-Production:										
PE-CO2-40.0L-3K-20SERver	40.0L	C	3000	Yes	5	20	10	20 (1 run)	240,000	267,000
PE-CO2-60.0L-3K-20SERver	60.0L	C	3000	Yes	5	30	10	30 (1 run)	340,000	379,000
PE-CO2-80.0L-3K-20SERver	80.0L	C	3000	Yes	5	40	10	40 (1 run)	440,000	491,000

Pricing includes:

- Freight/ Delivery
- All Peripherals (chiller for closed loop)
- On-Site Training and Commissioning

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