



Pro 10 | Pro 20 | Pro 30 | Pro 40

## Maximum Flexibility. Future-Proof Resilience.

# CO<sub>2</sub> & Multi-Solvent Extraction Systems





#### **EXTRACTION**

Vessel volume: 10 L / 20 L combinations Total extraction vessel volume: Up to 40 L  $^\dagger$  Liquid CO $_2$  pump: Up to 3 kg/minute Integrated multi-solvent system Temperature range: 10–150°F (-12–65°C) Pressure range (standard configuration):

- o MAWP: 2,200 psi (151 bar)
- Operating pressure: 500–2,000 psi (35–137 bar) Pressure range (high-pressure upgrade):
- MAWP: 5,000 psi (345 bar)
- o Operating pressure: 500–4,800 psi (35–331 bar)



#### CO<sub>2</sub> RECOVERY & STORAGE

 $\begin{array}{l} {\rm Closed\text{-}loop} \ {\rm CO}_2 \\ {\rm CO}_2 \ {\rm condenser} \\ {\rm CO}_2 \ {\rm remediation} \ {\rm filters} \end{array}$ 



#### **CONTROL PANEL**

Multiple user levels
Real-time monitoring
Remote diagnostics /
remote connectivity +
Live batch recording









GMP

- Depending on configuration
- + Requires broadband internet connection
- Δ Defined as 100.000 cycle
- ‡ Third-party syster





Pro 10 | Pro 20 | Pro 30 | Pro 40



#### **CONTINUOUS OPERATION**

Continuous cyclone separation †
Dual extractor configurations



#### **SPECIFICATIONS**

Weight: 3,500 lbs (1,588 kg)  $^{\dagger}$  Footprint (LxWxH): 200" x 37" x 80.75" (5m x 1m x 2m)

Can be transported through a standard 36" x 80" door



#### **SITE REQUIREMENTS**

Pneumatic supply ISO 8573-1 [5:4:3] @120 psi 12 SCFM Broadband internet connection

Power requirements (North America):

- o 460V 3\$\phi\$60Hz (standard)
- o 240V 1 \$\phi\$ 60Hz (optional)

Power requirements (EU, AUS, NZ):

Avg. operating power: 22 kWh / Max power: 35 kWh



#### ADDITIONAL STANDARD FEATURES

304 stainless-steel contact surfaces

Flow meter

Ethanol wash sequence / CIP compatibility

Integrated CO<sub>2</sub> (R744) refrigeration

HMI designed to ISA 101.01

Automated programmable start-up & shutdown

Pre-loaded recipes

User-programmable recipes

Over-the-air software updates<sup>+</sup>

Remote diagnostics capability<sup>+</sup>

Managed project implementation

Professional commissioning

On-site operator training



#### **SEPARATION & COLLECTION**

 ${\tt Continuous}\ {\tt CO_2}\ {\tt purification}$ 

Cyclonic separation

Pressure range: 300–720 psi (21–50 bar) Temperature range: 40–100°F (4.4–38°C)

Dedicated terpene collection



### CERTIFICATIONS, COMPLIANCE & WARRANTY

ASME/NB CSA-CRN
PED-CE CUL/UL
AS/NZS 1200 EU-GMP<sup>†</sup>

UKCA

Lifetime warranty $^{\Delta}$  on all pressure vessels One-year warranty on all other components Service plans available



#### **OPTIONAL FEATURES**

CIP (clean-in-place) system ‡
Pre-loadable biomass options
In-line extract filtration
Extended service plan
Bulk CO<sub>2</sub> storage solutions
Managed door-to-door logistics



#### OPTIONAL GMP SUPPORT ASSETS

We can provide the following GMP documents: URS, FRS, requirement traceability matrix, PHA, FAT, SAT, IQ, OQ, calibration certificates, technical design documents, wetted materials traceability, software disaster recovery plan.









GMP

‡ Third-party system

<sup>+</sup> Requires broadband internet connection

Δ Defined as 100.000 cycles