

Turnkey Automated Winterization Systems

maratek
Automate | Optimize | Scale

TWS/TAWS

Turnkey Automated Winterization System



Homogenization



Winterization



Filtration



Recovery



Decarboxylation



Heated Oil Storage

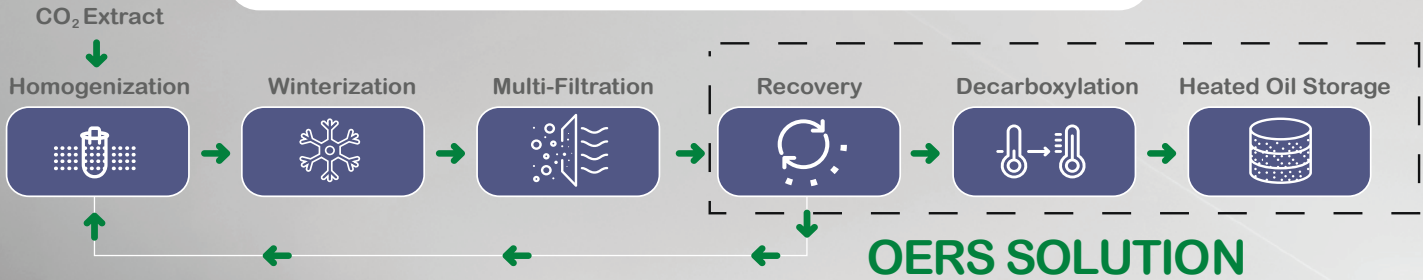


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Turnkey Winterization System 6 in 1 Solution

Turnkey Winterization System



Key Equipment Features

- Turnkey solutions from 3kg to 40kg of CO₂ extract per day
- Rapid -40°C winterization
- Filtration to below 1 micron for shelf stable product production, carbon filtration also available
- Class I Div II explosion proof and safety certified
- Fully stainless-steel construction
- High pressure Clean in Place (CIP optional)
- Allen Bradley PLC with data logging and programmable recipes
- Secure remote access and control which allows Maratek to perform remote troubleshooting when given access
- Operation time is 1-2 hours
- Cleaning time is 1 hour

Winterization Process



Homogenization:

Extraction process uses super critical CO₂ to attain a peanut-butter-like consistency for biomass, waxes, lipids, and undesirables to be separated.

Winterization:

Rapid winterization at -40°C with 2 cycles per day.

Filtration:

The ethanol and oil mixture is passed through filters ranging from 100 to 1 micron or less. Shelf stable products require a 1 micron or lower filtration stage.

Recovery:

The OERS 4 in 1 Recovery Solution will recover the ethanol used and automatically decarboxylate (optional) the oil all in one system.

Storage:

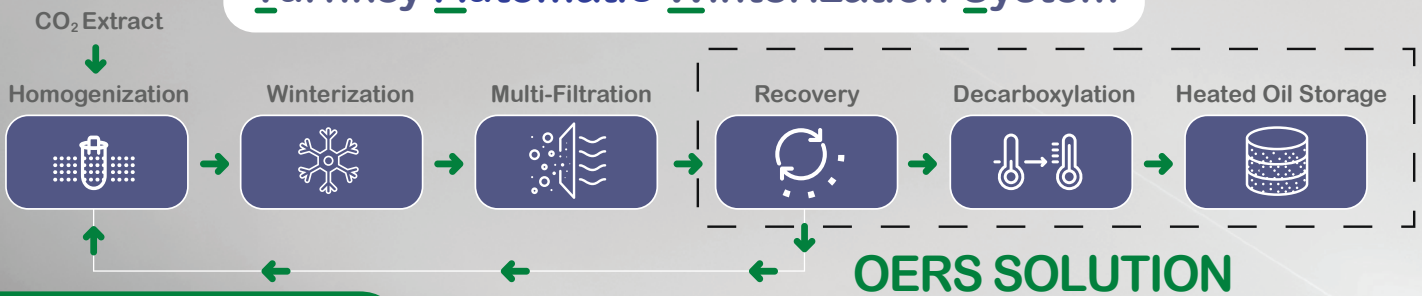
Heated storage for oil in jacketed tanks, ready to be used.



TWS 50

Turnkey Automated Winterization System 6 in 1 Solution

Turnkey Automatic Winterization System



Key Equipment Features

- Turnkey solutions from 3 to 500 kg of CO₂ extract per day
- Automatic homogenization, winterization, filtration, ethanol recovery, decarboxylation and heated oil storage in 1 process
- Fast automatic closed loop operation
- Single and multi stream configurations available
- Rapid winterization in -20°C and -40°C
- Advanced filtration to below 1 micron for shell stable product production
- Carbon filtration also available
- Class I Div I Group D explosion proof and safety certified (Metlab)
- Fully stainless-steel construction
- High pressure Clean In Place (CIP)
- Allen Bradley PLC with data logging and program mable recipes
- Secure remote access and control

World Class Technology, Automation and Service



**Lifetime remote service at no extra cost.
Minimize downtime.**

We can seamlessly resolve problems you may encounter right from our office with our remote access PLC. With your permission, we will be able to access your systems controls to assist with diagnostics and troubleshooting to minimize downtime. Your Organization will also have the same secure remote operational capabilities.



TAWS 200



About Maratek

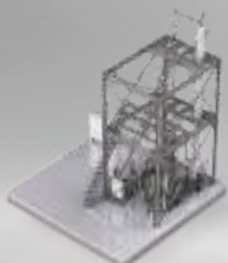
Maratek is an award-winning industry leader in the solvent recycling and cannabis & hemp oil production industries. We strive for the highest safety and quality standards with all our equipment designated as Class 1 Division 1 certified, and UL listed using only **North American stainless steel, parts, and labour.**

With over 50 years of experience in solvent waste and recovery industry, Maratek has solved a wide variety of engineering challenges. Let us provide world-class engineering services to integrate systems and provide closed loop cannabis & hemp oil production processes.

Cryogenic Ethanol Extraction
Series - EV - M



Oil and Ethanol Recovery Systems - OERS & Helios



Fractional Distillation and
Dewatering Systems - F-Series

The Maratek Family of Cannabis & Hemp Equipment and Services



Water Extraction and Refining
Trident and Poseidon



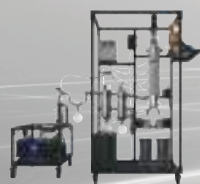
Turnkey Automatic
Winterization Systems - TAWS



MIPs



Isolate
Production



Oil Distillation
Systems



Engineering
Services

Contact

References available upon request with installations in facilities across the US, Canada and globally. Contact us now for a quote on our family of cannabis and hemp solutions!

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