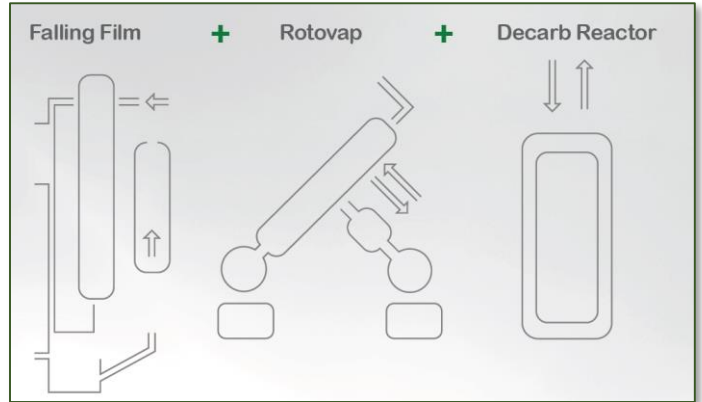


**Integrated product design for
improved efficiency**

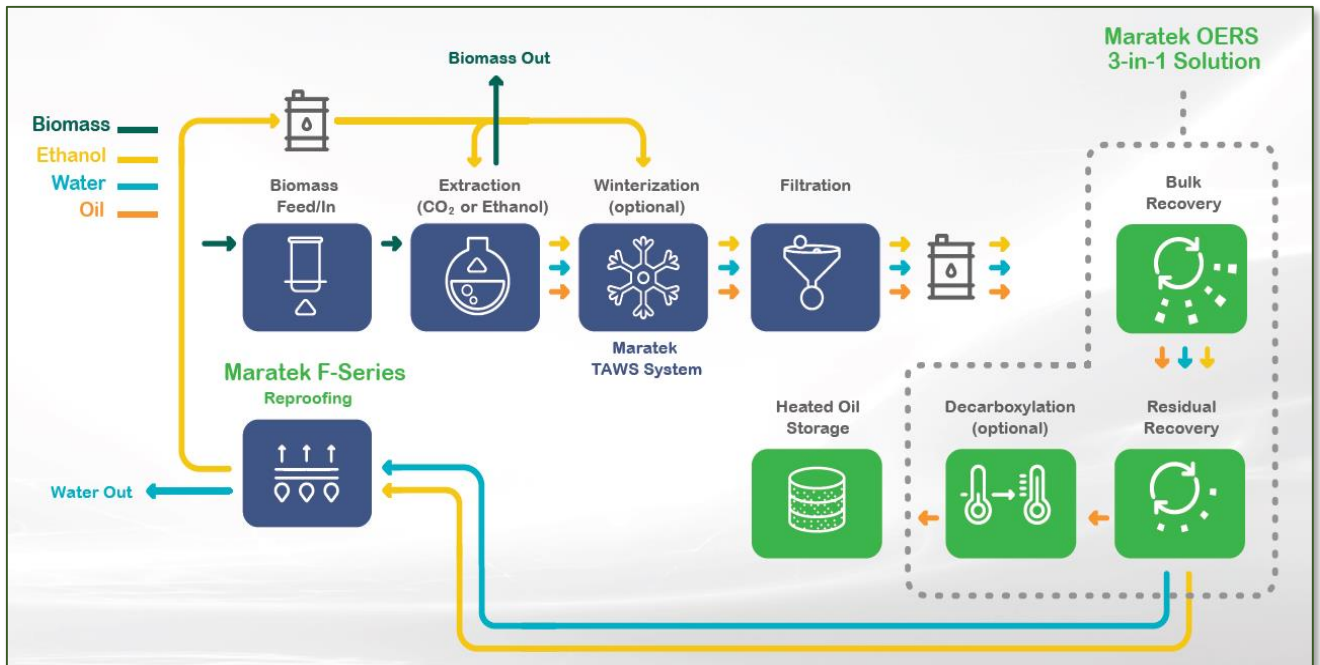
THE MARATEK ADVANTAGE

INTEGRATED 3-IN-1 PRODUCT DESIGN

Efficiency and Purity are the key priorities for companies producing cannabis oil products. Having multiple transfers between various equipment in the overall process lead to undesirable inefficiencies. It may also need additional operator time to oversee and organize the transfers.



Maratek equipment simplifies and improves overall efficiency by implementing a single system that can complete ethanol recovery, oil drying, and decarboxylation in one vessel. Producers can lower operator intervention, increase automation, and see significant throughput increases.



Maratek equipment decreases processing time, simplifies process flow, and integrates the key production steps all to one piece of equipment. These three key production steps are fully automated and controlled by the Maratek control system, fully developed tested and supported, in house.

THE MARATEK ADVANTAGE

INTEGRATED 3-IN-1 PRODUCT DESIGN

BULK RECOVERY

The extract is gently boiled under vacuum to prevent any decomposition of your valuable products while removing the bulk of the ethanol present. The operator can either preprogram using a timer and/or liquid level sensors, or actively decide the desired volume of liquid to process. Recovered ethanol can then be reused for the next batch.

RESIDUAL RECOVERY

The system will continue drying out the oil of all present ethanol while bulk collecting the oil and maintaining temperature control throughout the mixture. This will produce oil with a guaranteed ethanol residual of less than 2%. The control system will automatically detect the endpoint of this process through temperature monitoring and commence the patented decarboxylation process.

DECARBOXYLATION

For the patent pending decarboxylation processes, the control system monitors progress of decarboxylation of cannabis oil through proprietary equipment integrated with the automatic solvent recovery system. This will provide an alert to operators that the system has finished the decarboxylation of the oil and is preparing for the discharge phase.

Maratek's computer controlled, virtually autonomous system is clearly superior and efficient. We provide increased control, increased throughput, and full process monitoring at all stages, so that our customers can closely monitor the valuable oil at any time.

PHASE SETUP	
INITIAL FILL	ON
HEAT UP	ON
ETHANOL REMOVAL	ON
BOIL DOWN	ON
DECARBOXYLATION	ON
COOL DOWN	



maratek

Automate | Optimize | Scale

OERS-SC & OERS-C

Automatic Ethanol Recovery and Decarboxylation

TAWS

Turnkey Automatic Winterization Systems

F-SERIES

Fractional Distillation and Dewatering Systems

TURNKEY FACILITIES

Turnkey Extraction Facilities and Engineering

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