



Algae harvesting

Boost yield and product quality by harvesting with Evodos 'Dynamic Settlers'

Increase yield by using Evodos 'Dynamic Settlers'

Harvesting microalgae like *Nannochloropsis*, *Dunaliella*, *Diatoms*, *Chlorella*, *Tertraselmis*, *Scenedesmus*, *Phaeodactylum*, *Haematococcus*, *Isochrysis* with Evodos, boosts value.

Traditionally this is carried out by conventional centrifuges. Not only is this an inefficient process, but it also leads to wet algae paste with a low DW content and damaged algae cells.

Evodos overcomes these drawbacks. Thanks to the patented 'Spiral Plate Technology' integrated in all Evodos 'Dynamic Settlers', efficiency increases (typically >95%), produces a dryer algae paste up to 30% DW and even fragile algae cells are harvested intact and undamaged.



Evodos transformed the algae harvesting industry, enabling excellent results with even the most challenging algae strains. Today we have customers worldwide and our unique technology outperforms traditional separation and harvesting equipment, opening the door to new markets and applications.

Evodos 'Spiral Plate Technology'

Our spiral plate technology is a simple but brilliant extension of high school physics. It enhances gravitational forces in a manner similar to traditional centrifuges, but minimizes the distance particles must travel before settling. It uses laminar flow rather than turbulent flow, or mixing, meaning even ultrafine particles are more easily captured. It also means we outperform other technologies.

Due to numerous hinged plates, particles don't travel far before 'landing' on a relatively large settling area. Artificial gravity, caused by rotation of the drum, separates heavy liquids from those that are lighter.

Evodos is the only technology that efficiently separates fine and ultrafine particles. Our technology also produces a dry, solid algae paste. Our process mirrors and accelerates nature's own processes using a purely mechanical process. No chemicals or flocculants are required but the system does accommodate chemicals required by customer processes. Evodos 'Dynamic Settlers' have a gyroscopic shaft and a motor that are self-adjusting which reduces maintenance, costs and downtime. The equipment is compact and does not need to be bolted to flooring or require any special foundation. When grouped together, the deceleration of one unit can be used to power up another. Additionally, Evodos' quick acceleration and deceleration processes keep uptime optimal, and allow for optimal safety procedures.

Spiral plate pack



Product portfolio

Evodos 10

The Evodos 10 is ideal for small scale processing up to 750 liters per hour as well as for research and testing applications. It has a manual discharge process.

Evodos 25

The Evodos 25 is suitable for processing dedicated flows up to 3,000 liters per hour, and has a feed flow maximum of 4,000 liters per hour. This model is designed for small- midsize scale processing and includes remote monitoring and is fully automated for 24/7 production.

Evodos 50

The Evodos 50 has a higher capacity than our other models – up to 4,000 liters per hour. Fully automatic and capable of 24/7 operation. This model is capable of separating a variety of solids including abrasive, non-permeable, soft and greasy materials and includes remote monitoring.

Model	Foodprint l*w*h (mm.)	Weight (kg.)	Discharge	Discharge (liters)	Maximum feedflow (liters/hour)	PLC controlled	Remote monitoring
Evodos 10	1200*800*1150	650	Manual	up to 3 per batch	750	No	No
Evodos 25	1195*1208*2179	2000	Automated	up to 50 per hour	4000	Yes	Yes
Evodos 50	1650*2250*2279	2905	Automated	up to 100 per hour	4000	Yes	Yes

Evodos 10



Evodos 25 / 50



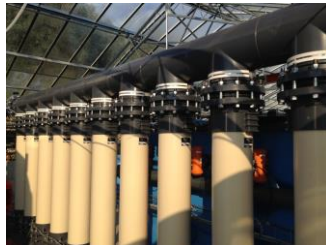
Integrated algae harvesting solutions

It's Evodos mission to deliver clients not only equipment, but also the advise how to integrate different technologies into an integrated algae harvesting solution.

Clients are facing challenges like:

- Energy efficient processing of large volumes
- Recycle the water for algae production
- Bacterial removal from recycled water
- Scale solutions from test to pilot to commercialization

We work together with suppliers to deliver the integrated algae harvesting solutions to our clients



Feed concentration

Pre-Concentration

Evodos Dynamic Settler

Increased yield, top quality algae paste and improved efficiency

These are the benefits of using Evodos algae harvesting equipment

Technological innovation

- High separation effectiveness through 'Spiral Plate Technology'
- Low shear through smooth discharge mechanism

Your added value

- Top quality algae paste with a high DW percentage
- Even the smallest and most fragile algae are harvested successfully
- All algae cells are harvested intact and undamaged
- All valuable components inside the algae cells are retained
- Minimized energy consumption in the downstream process



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