

The Adequate Sludge Treatment



Clean Eco-Technologies

Thickening

Dewatering

Product Range
ADEQUAPRESS



Low Energy Technology
10 Wh per kg of DS



Applications

Treatment for any type of Waste Water

The ADEQUAPRESS is a compact and robust sludge dewatering and thickening system, able to process biological sludge generated during wastewater treatment (municipal, industrial and agricultural), with initial concentration from 2 g/l to more than 30 g/l.



Advantages

Characteristics

- Robust and easy to use
- Self-cleaning and non-clogging
- Reliable thanks to its slow screw rotation
- High adaptability to the sludge quality
- Low odour (due to short transition time of the sludge)
- Quiet and vibration-free equipment
- Low energy consumption (less than 10 kWh per kg of dry solid)
- Low polymer consumption (3-6 kg per ton of DS)
- Uptime near 100%

Easy installation

- Connect directly to the aeration tank
- No prior concentration or thickening needed
- Ready-to-use unit, which can directly be connected electrically and hydraulically
- Easy integration within the existing WWTP :
 - Low Rated Power (0,5 to 1,5 kW)
 - Compactness (<3 m² on ground for 10 000 PE)
- Easy to handle (pallet truck)

Simple Utilization

- Completely automated operation, 24/7
- Instantaneous STOP&GO, no human intervention needed
- Quality of the sludge flock can be controlled visually (no qualified personnel required)
- Surveillance can be reduced to a minimum

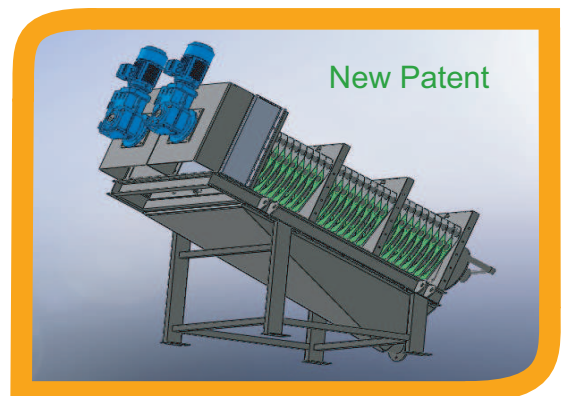
Adapted Product Ranges

The ADEQUAPRESS is built in 3 Product Ranges :

- TH (Thickening) thickens sludges, dryness: 5% to 10 %
- DH (Dehydration) dewater sludges, dryness: 15% to 23 %
- H (Hybrid) thickens and/or dewater

The different models of each range allow to meet the requirements of WWTP's from a few hundred to several million Population Equivalent.

Thanks to its uptime close to 100% and its fully automatic operation, ADEQUAPRESS allow excess sludge extraction to follow real biology sludge production, which improves biological process efficiency.



- **SWINGPRESS**: ADEQUAPRESS new generation with frictionless 750 mm big drum for big scale WWTP's.



Principle

The particularity of the ADEQUAPRESS resides in its clever design, combining a multistep screw with variable interspace between the screw threads and a self-cleaning, non-clogging drum.

The slowly-rotating screw both conveys and consolidates the sludge. The size of the whorls and the distance between them are adapted to the specific application and objectives to be reached.

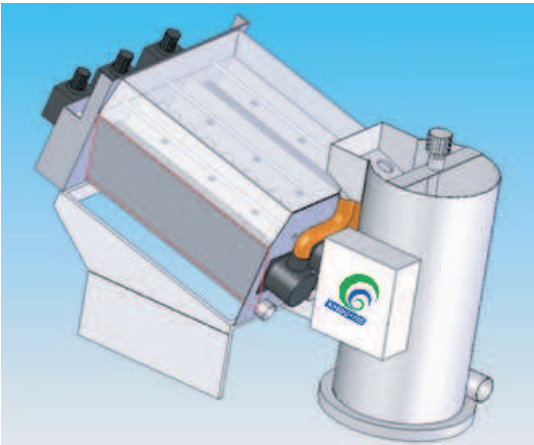
The drum, composed of a series of fixed and mobile discs, successively ensures the dripping, thickening and squeezing of the sludge. The pressure, performed by a disc

placed at the sludge discharge, regulates this process.

Through its rotation, the screw leads to a sliding of the mobile discs between the fixed discs. This movement scrapes the sludge and moves it towards the inside of the drum, while releasing clear filtrate to the outside.

Thanks to this combination of discs and screw, the drum is self-cleaning and does not require any washing- or unclogging system.

The ADEQUAPRESS can operate 24/7 if required.



Operation

The sludge is pre-treated in a flocculation reactor composed of two zones. The first features high agitation, in order to foster the mixture of sludge and polymer, while the second one, with lower agitation, is favourable for the swelling and the densification of the flock.

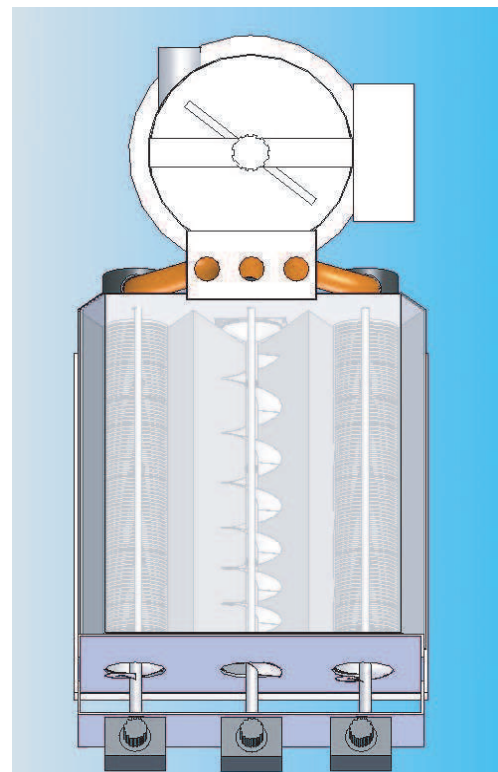
The flocculated sludge is then transferred gravitationally towards one or several drums, where the liquid/solid separation takes place.

Depending on the aimed final dryness, the rotation speed of the screw and the wringing pressure can easily be adjusted, in order to fit each project perfectly.

The filtrate is very clear and will generally be returned to the head of the WWTP.

The drum is regularly sprinkled with a small amount of water (20 to 50 l per hour) in order to keep its exterior clean and avoid smell to be generated.

Diluted or concentrated sludge from 2-30 g/l



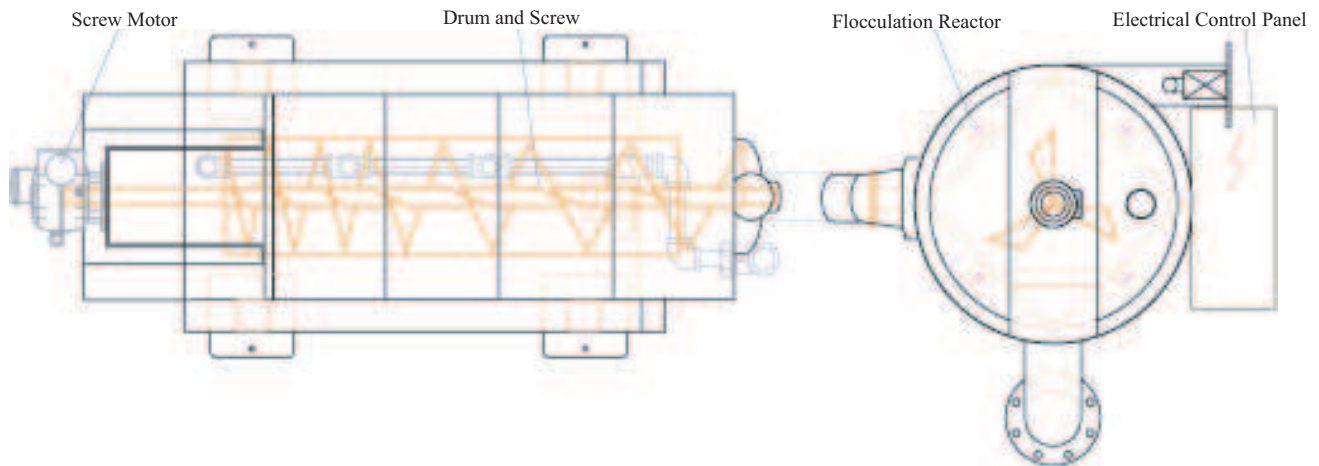
5 to 23 %
dryness

TH Range
5 à 10%

DH Range
15 à 23%

H Range

Technical Characteristics



Model	Performance	Dimensions LxWxH (mm)	Surface (m ²)	Rated Power (kW)
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DH Range				
DH 1100	3 - 6 kg DS/h	1350x 280 x 900	0.38 m ²	0.17 kW
DH 1200	6 - 12 kg DS/h	1350x 550 x 900	0.74 m ²	0.33 kW
DH 2100	9 - 16 kg DS/h	2000x 480 x 1100	0.77 m ²	0.43 kW
DH 2200	18 - 32 kg DS/h	2000x 840 x 1100	1.34 m ²	0.61 kW
DH 3100	30 - 45 kg DS/h	2700x 750 x 1750	2.03 m ²	0.62 kW
DH 3200	60 - 90 kg DS/h	2700x 1150 x 1750	3.11 m ²	0.99 kW
DH 3300	90 - 135 kg DS/h	2700x 1600 x 1750	4.32 m ²	1.36 kW
DH 3400	120 - 180 kg DS/h	2700x 2000 x 1750	5.40 m ²	1.73 kW
TH Range				
TH 1100	2 - 5 m ³ /h	1050x 280 x 900	0.29 m ²	0.50 kW
TH 1200	4 - 10 m ³ /h	1050x 550 x 900	0.58 m ²	0.85 kW
TH 2100	5 - 12 m ³ /h	1600x 480 x 1100	0.77 m ²	0.80 kW
TH 2200	10 - 24 m ³ /h	1600x 840 x 1100	1.34 m ²	1.35 kW
TH 3100	25 - 35 m ³ /h	2100x 700 x 1600	1.47 m ²	1.35 kW
TH 3200	50 - 70 m ³ /h	2100x 1150 x 1600	2.42 m ²	2.45 kW
TH 3300	75 - 105 m ³ /h	2100x 1600 x 1600	3.36 m ²	3.55 kW
TH 3400	100 - 140 m ³ /h	2100x 2000 x 1600	4.20 m ²	4.65 kW
H Range (*)				
Up to 10 000 PE				
Identical Characteristics as the DH range. Please contact us for further information.				
Coming Soon: DH 4, 5, 6 and 7				

