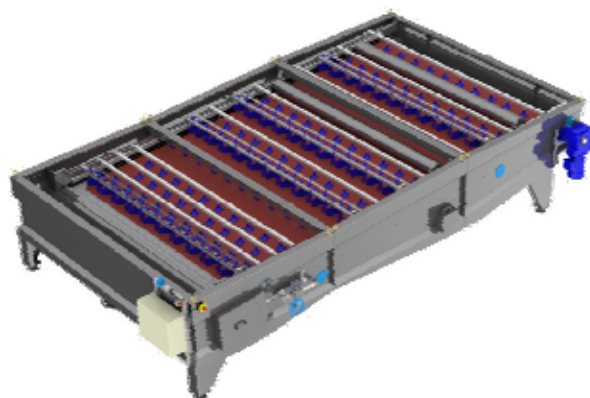


GRAVITY BELT THICKENER OMEGA THC

Leader in the design and the manufacturing of sludge treatment systems for drinking water, waste water and sludge, EMO is present in 5 continents of the globe and holds more than 2500 recommendations to its credit since the company's creation in 1985. The OMEGA Gravity Belt Thickener is designed for the continuous mechanical thickening of municipal or industrial sludge.

This simple and efficient technology aims at reducing the sludge volume at least 4 times with following characteristics:

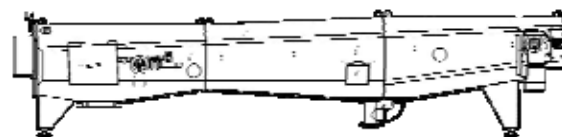
- ✓ Low energy consumption,
- ✓ Reliable material,
- ✓ Easy and low maintenance and supervision,



Technical data

The Gravity Belt Thickener OMEGA THC can be used:

- ✓ As a final step to increase the sludge DS concentration to 6–8%. Therefore, replacing conventional gravity static thickener, flotation system, ...
- ✓ As a pre-dewatering stage when combined in-line with a Belt Filter Press to optimize the Belt Filter Press operation and performances,
- ✓ As a pre-dewatering stage before a Plate Filter Press or centrifuge to downsize the dewatering equipment,
- ✓ As a sludge volume reduction before anaerobic digestion process to reduce digester size.



The OMEGA THC range has been especially designed for very high capacity installation. Its mechanical functions and components have been adapted to process conditions up to 200 m³/h of raw sludge!

Installations



**3 Combined Units
OMEGA 25 THC / OMEGA 1250
High Version**



**11 Gravity Belt Thickeners
OMEGA 30 THC**

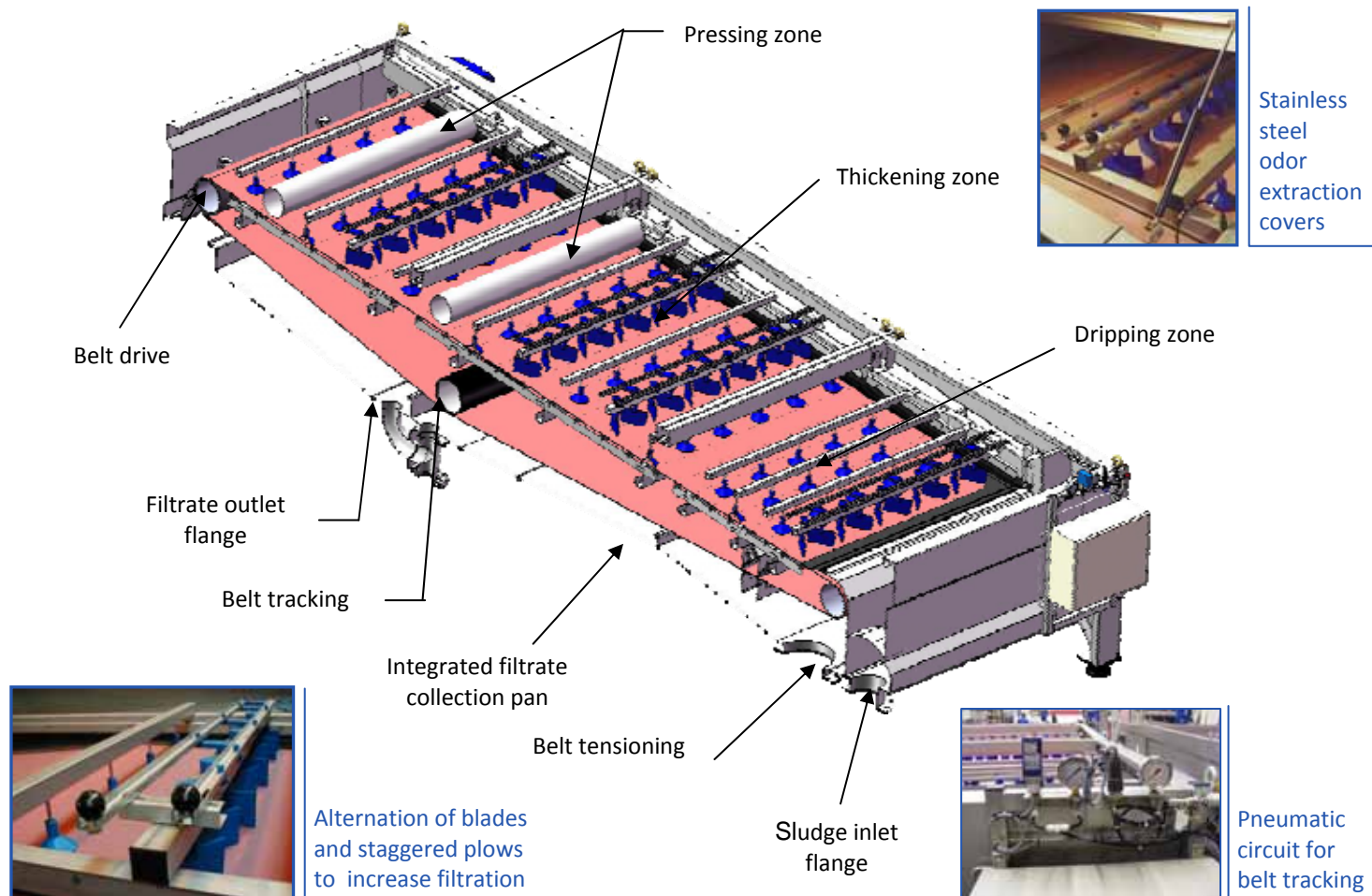


**Gravity Belt Thickener
OMEGA 30 THC**



Operating principle

The OMEGA belt thickener consists of a stainless steel frame, sludge distribution tank, gravity drainage zone, variable speed drive, continuous belt washing system, compression zone, mechanical belt tracking and tensioning systems, filtrate collection pans, internal wiring and pipe-work, electric control panel (optional), safety operation devices.



Selection tables

The OMEGA gravity belt thickener designed by EMO is used for the continuous thickening of all types of sludges to obtain a Dry Solids concentration of cake from 6 % to 10 %. (With a solids matters capture rate higher than 96 % and a low polymer consumption). These values can be revised for others parameters – for example – if the inlet is greater than 10 g/l or if the expected output DS % less than 50 g/l.

Model	Filtration length	Belt width	Dimensions (l x w x h)	Hydraulic flow (for information)
OMEGA 10 THC	5 m	1,00 m	6,09 x 1,72 x 1,40 m	15 à 40 m ³ /h
OMEGA 15 THC	5 m	1,50 m	6,09 x 2,22 x 1,40 m	25 à 70 m ³ /h
OMEGA 20 THC	5 m	2,00 m	6,09 x 2,72 x 1,40 m	30 à 100 m ³ /h
OMEGA 25 THC	5 m	2,50 m	6,09 x 3,22 x 1,40 m	40 à 120 m ³ /h
OMEGA 30 THC	5 m	3,00 m	6,09 x 3,72 x 1,40 m	50 à 160 m ³ /h
OMEGA 35 THC	5 m	3,50 m	6,09 x 4,22 x 1,40 m	50 à 180 m ³ /h
OMEGA 40 THC	5 m	4,00 m	6,09 x 4,72 x 1,40 m	50 à 200 m ³ /h