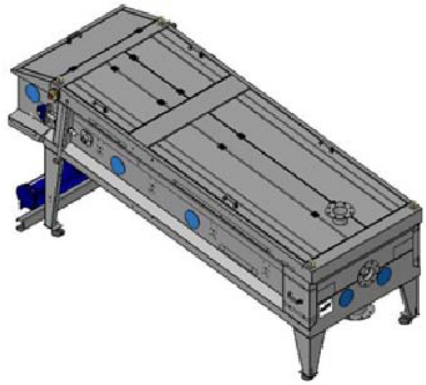
Aqualitec
Screening Equipment & Sludge Treatment

OMEGA MD
GRAVITY BELT THICKENER

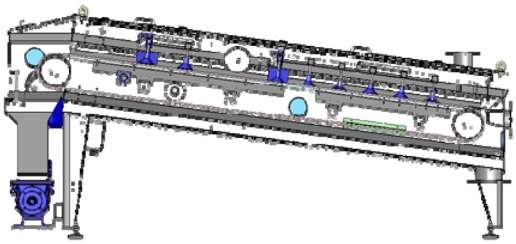
Features and Benefits



The OMEGA Gravity Belt Thickener is designed for continuous mechanical thickening of municipal or industrial sludge.

OMEGA's innovative and efficient technology reduces sludge volume by at least 4 times. The simple, rugged design offers a number of benefits:
√ Low energy consumption
√ Reliable and durable components
√ Low maintenance and operations supervision

Description



Customers use OMEGA MD in a number of sludge thickening applications:

√ As a final step to increase the dry solids concentration to 6–8%, replacing conventional gravity static thickeners, flotation systems, and other inefficient technologies.

√ As a pre-dewatering stage, when combined in-line with a belt filter press, to optimize filter press efficiency.

√ As a pre-dewatering stage before a plate filter press or centrifuge, to downsize the dewatering equipment.

√ For sludge volume reduction before anaerobic digestion processes to reduce digester size.

Installations

« Twin » OMEGA 25 MD

OMEGA 15 MD combined with belt filter press

6 sets Gravity Belt Thickener
OMEGA 30 MD

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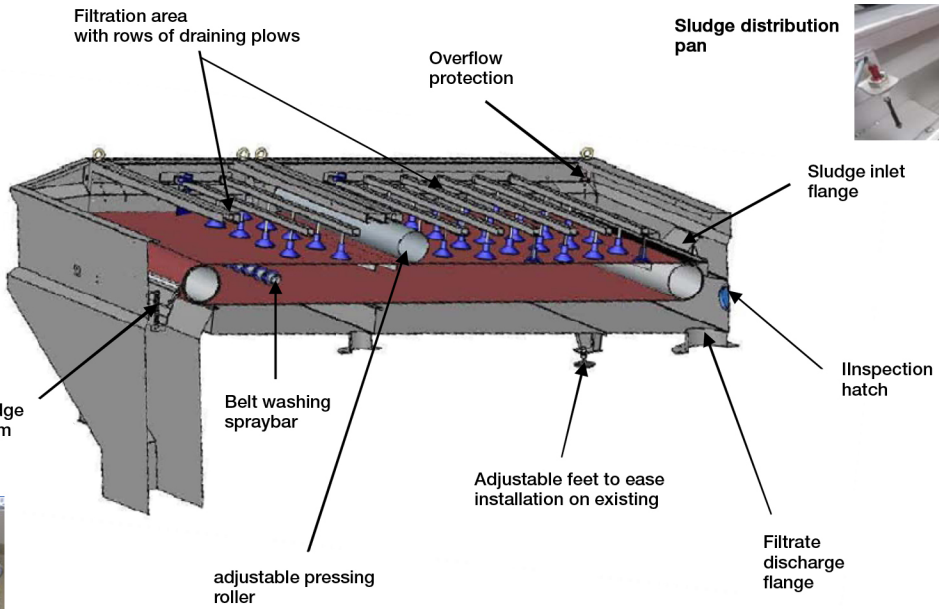
Operating Mode

The OMEGA MD 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 plumbing, electric control panel (optional), and operator safety devices.

Sludge cake discharge



Specifications

OMEGA gravity belt thickener achieves continuous thickening of all types of sludge to obtain a dry solid cake concentration of 6% to 10%. It captures solid matter at a rate higher than 96%, and enjoys low polymer consumption.
The OMEGA gravity belt thickener model should be selected to match the desired DS loading rate per hour and belt meter width. Note that the rate varies between sludge types.

	Ω 10 SD	Ω 15 SD	Ω 20 SD	Ω 25 SD	Ω 30 SD
Belt width	1 m	1,5 m	2 m	2,5 m	3 m
Belt length	6 m	6 m	6 m	6 m	6 m