



## FILTER BELT PRESS

FOR SLUDGE DRYING

Man-made water purification is always a combination of mechanical, biological and chemical treatments. As knowledge and know-how develop, biological purification becomes more and more important and its role gains increasingly in significance. Just as in nature and with as few chemicals as possible or even with none at all.

# FILTER BELT PRESS

For sludge drying

## The filter belt press is suitable for all types of sludge

This efficient, energy- and space-saving filter belt press offers the most cost-effective solution for drying sludge, in terms of both capital and running costs. The system is made up of two parts: rotary drum thickener and filter belt press. The sludge to be dried is pumped into the drum thickener where the polyelectrolyte solution is mixed with the sludge to flocculate it. The majority of the water is removed in the drum and the sludge flow discharging onto the filter belt is evenly distributed. An even sludge load optimizes the pressing process and the capacity of the unit.

Water removal continues on the filter belt. The filter belts are controlled automatically by pneumatic adjustment of the compression force. The pressure increases gradually as the sludge flows from the free discharge zone into the compression zone. Both upper and lower filter belts have their own drive rollers which increases the press's operational reliability. Problems caused by splash water and unpleasant odours are eliminated due to the closed construction. The odours generated are routed directly into the exhaust system.

The side covers of the belt press can, however, be opened if necessary, which ensures that all parts of the system are easily accessible when required. Cleaning and maintenance has been reduced to a minimum thanks to automatic pre- and post-washing of the drum, filter belt and water collector trough. The technical equipment of the Preseco Pomiltek filter belt presses has been designed so that it can be linked to all control and automation systems.

An automatic sludge detector is available as an optional extra for sludge inflow control and it stops the filter press if a fault is detected in the process.

## Reference values

The dried sludge discharge height is 800 mm with 300 mm support legs. When positioning the equipment, please note that 1000–1500 mm free space is required all round and about 500 mm is required above the unit for maintenance purposes.

## Optional Extras

- Automatic lubrication system for bearings
- Sludge detector and flow measurement equipment
- Frequency converter control
- Ventilation connection and fan
- Double integrated thickening drum for high hydraulic capacities, up to 100m<sup>3</sup>/h
- Integrated static and dynamic flocculators
- NP high pressure equipment for drier sludge requirements

## Auxiliary equipment

We can supply automatic polymer equipment, dried sludge storage silos, discharging devices and various transfer conveyors as auxiliary equipment for sludge drying.

PMT	1000	1200	1500	1700	2000
Length (mm)	3100	3100	3100	3100	3100
Width (mm)	1300	1500	1800	2000	2300
Height (mm)	2200	2200	2200	2200	2200
Weight (kg)	1400	1600	1900	2100	2500
Capacity (m <sup>3</sup> /h)	3–15	4–20	6–26	8–40	12–50
Capacity (kg DS/h)	220	300	400	600	750
Belt width (mm)	1000	1200	1500	1700	2000
Motor of thickener (kW)	0.37	0.37	0.37	0.55	0.55
Motor of press (kW)	0.55	0.75	0.75	0.75	1.10