

Data sheet:
Sludge screw press MP-DW-403



Description:

The Sludge screw press can automatically dewater sewage sludge produced from:

- DAF (Dissolved Air Flotation)
- FBBR (Fixed Bed Biological Reactor)
- SBR (Sequencing Batch Reactor)

By reducing sludge amounts, there is a major cost saving on sludge disposal costs.

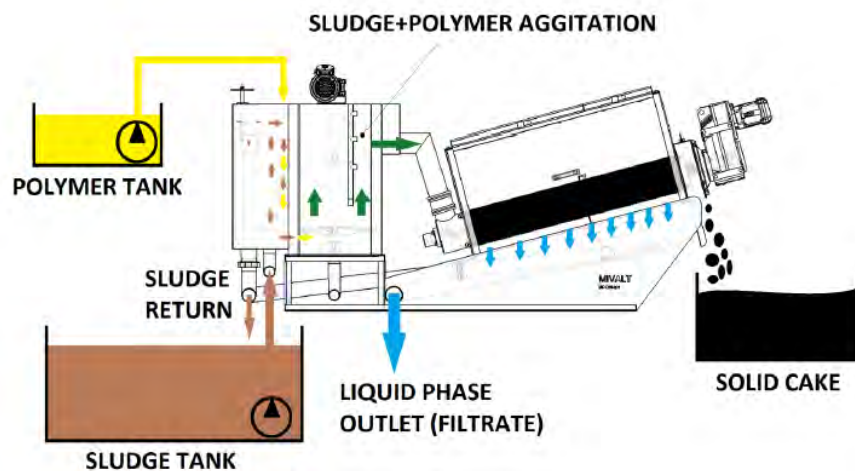
The following are pre-installed as standard: the screw press (including the integrated sludge tank), the flocculation system (Polymer tank) and the collection container (e.g. debris trough).

The screw press consists of three dewatering zones: 1) thickening, 2) filtration and 3) compression.

In the thickening zone of the dewatering drum, the solids are separated, and the liquid is discharged. This is followed by the dewatering zone, where the pressure increases due to the decreasing pitch of the screw and the smaller distances between the rings. Finally, the pressed sludge cake is discharged.

The sludge is continuously conveyed by means of a screw shaft inside the unit. The interaction of fixed and movable rings ensures self-cleaning, which prevents clogging. In a flocculation reactor with agitator, the sludge can first be conditioned with polymers. This achieves better dewatering results.

The separated water is returned by gravity to the wastewater treatment plant. The pressed sludge is then automatically discharged and collected.



Application:

The standard application for this mini press from PPU is the treatment of sludge from:

- the DAF (30 – 50 L/h sludge production per 1 m³ flooded wastewater) with 3 – 5% DM
- the biological treatment (secondary sludge) with 1% DM

The inlet sludge concentration can vary from 2 g/L up to 50 g/L.

The discharge sludge can have a TS of up to 30-40 %.

Small flow rates; Municipal sludge (such as primary, secondary and mixed sludge); Sludge from industry

In our calculation we give an indication of how much volume the sludge has per day. For larger plants screw conveyors to another storage place are available.

Technical data:

Solids throughput	Min. 330 kg DS/h
Hydraulic throughput	Max. 80 m ³ /h
Length screw press	5040 mm
Wide screw press	2160 mm
Height screw press	2270 mm
Net weight	3750 kg
Machine body and core parts materials	AISI304, AISI316L
Current	4,9 kW (without pumps)

Options on request:

Polymer mixing station. Required for:

- secondary sludge
- sludge from DAF or mixed sludge considering used polymer in DAF

Switchboard:

- the switchboard can be omitted when integrated into the main control system of the wastewater treatment plant

Characteristics of ClearFox® Sludge press

- Continuous loading and all-day operation possible!
- No clogging thanks to the highly effective annular space principle!
- Stable treatment capacity due to continuous pressure increase along the dewatering zones!
- Easy maintenance of the system components!
- Significant cost savings in sewage sludge disposal

Benefits of ClearFox® Sludge press

- low energy consumption
- almost maintenance free operation
- affordable and available spare parts
- special tungsten carbide surface treatment of stressed parts
- simple installation and operation
- low noise and vibration levels
- wide use applications – municipal & industrial
- automated 24/7 regime – if requested
- high quality workmanship, manufactured in the EU
- experienced manufacturer with hundreds of machines installed worldwide
- more than 100 machines in operation
- proved quality components used – SEW EURODRIVE, motive, injecta
- short lead times (2 Months max.)

