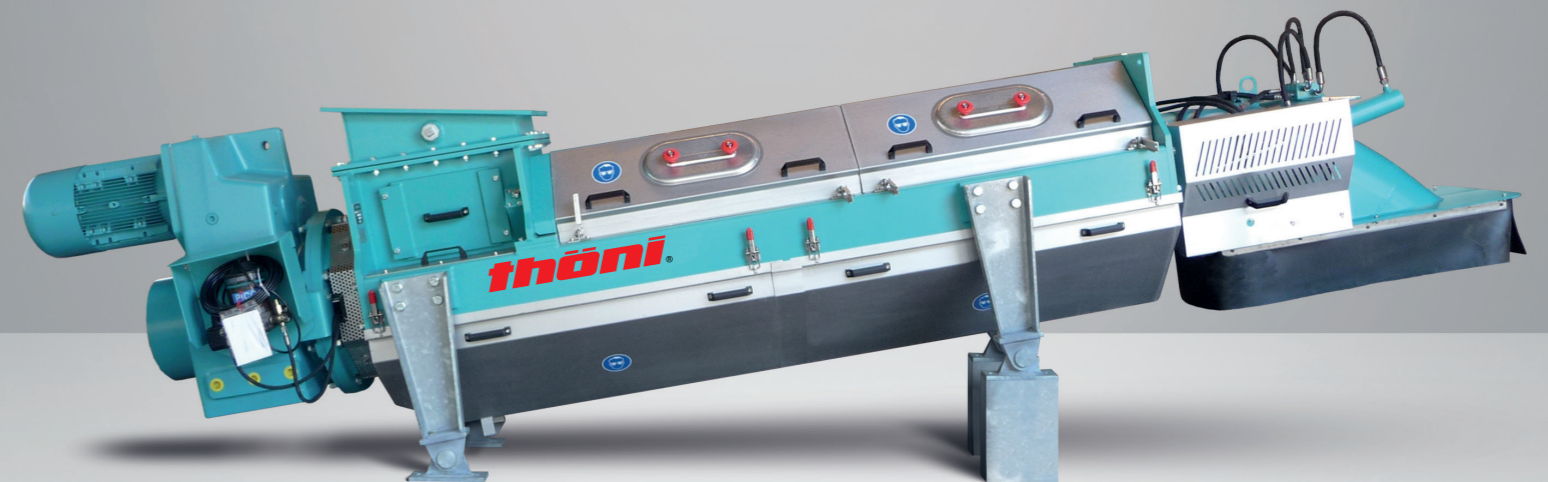


Thöni Screw Press (TSP 350-C) High performance dewatering unit



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With our help you can turn waste into energy. Thöni – Your competent partner!

Functional description:

The Thöni screw press (TSP 350-C) is very well suited for the dewatering of fermentation residues of various composition and different dry substance contents.

The machine separates the material into a solid and a liquid fraction. In the process, the incoming substrate is fed through the press against a hydraulically operated flap gate. Due to the counter pressure created this way, the dewatering takes place in the screening section.

Depending on the substrate, the degree of dewatering can be varied by variably setting the individual parameters (flap gate pressure, speed of the press screw) or by variably fitting the screw press (gap widths and/or hole diameter of the screens). The system is driven by a flat gear motor with 22.0 kW.

The design pays special attention to easy maintenance and resistance to wear (uncomplicated installation and removal of wearing parts, easy cleaning etc.).

The Thöni screw press is manufactured in the company's own machine and plant construction facility. Over 130 presses are currently used in organic waste fermentation plants worldwide.

Machine data

Dimensions: L/W/H: approx.
5,500 / 1-200 / 1,300 mm

Weight: approx. 3,500 kg

Drive: Gear motor 22.0 kW

Speed: max. 11 rpm

Designed for the operation with a frequency converter

Press screw

Screw diameter: approx. 350 mm

Conical screw core

High-quality plating

Special gear tooth coupling for optimum power transmission

Screening section

Screens in stainless steel design

Variable fitting of slotted or perforated screens possible

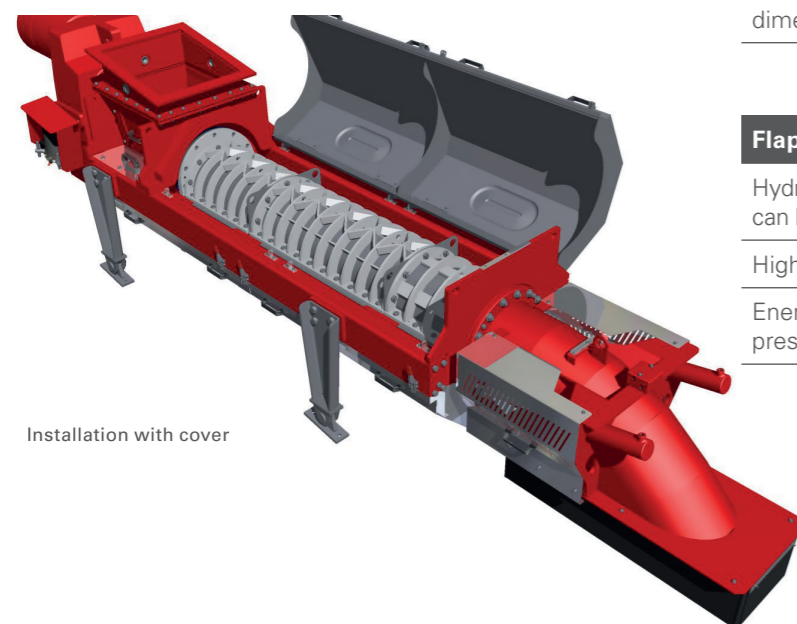
Various slot and borehole dimensions

Flap gate

Hydraulic pressure at the flap gate can be adjusted from 10–140 bar

High resistance to wear

Energy-saving hydraulic unit with pressure accumulator



Installation with cover

Power / performance / benefits

- High drive power
- Robust, wear-resistant design
- Optimum dewatering behaviour due to a special screw geometry
- Optimum feed of substrate, since the substrate is directly entered into the screening section
- High efficiency (ideal content of dry substance in the press cake)
- Easy maintenance
- Uncomplicated installation and removal of wearing parts
- Easy cleaning

Precision

In certain areas of the machine, the function and performance are determined by tenths of a millimetre. Therefore, the gap widths between the screw and the screens and/or wear ring have a significant effect on the dewatering performance. The design of the swimming seal and the coupling teeth also require precision. We achieve the required degree of precision using special manufacturing machines in our plant.

Robust design

The high drive power and the counter pressure at the flap are causing enormous mechanical loads in the machine. We therefore pay special attention to a solid dimensioning of the components.

Corrosion resistance

All components that come into contact with the substrate and the press water are made of stainless steel. All frame components are coated with a high-quality 2-component epoxy resin coating.

Resistance to wear

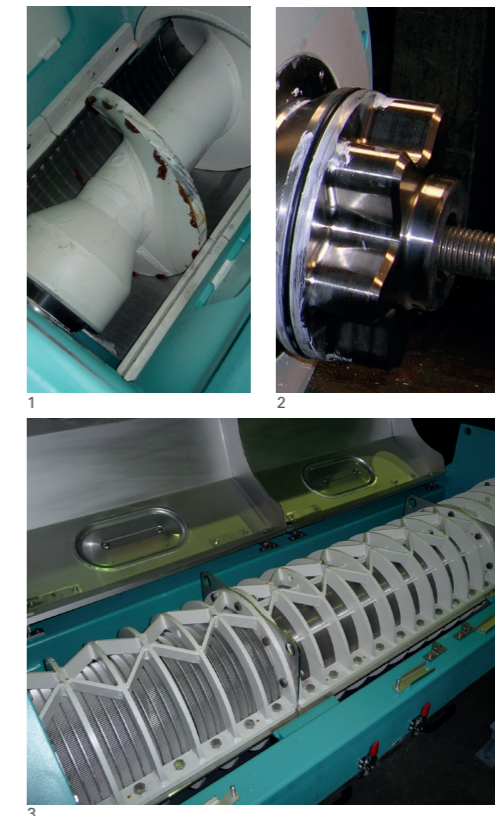
Due to the consistency of the substrate (the content of contaminants such as sand, stones, glass etc.) and the high dewatering forces, a high resistance to wear of the material is required.

The solid dimensioning of the components as well as the careful selection of high-quality materials in connection with the state-of-the-art production technology make sure that the Thöni screw presses feature the highest possible resistance to wear.

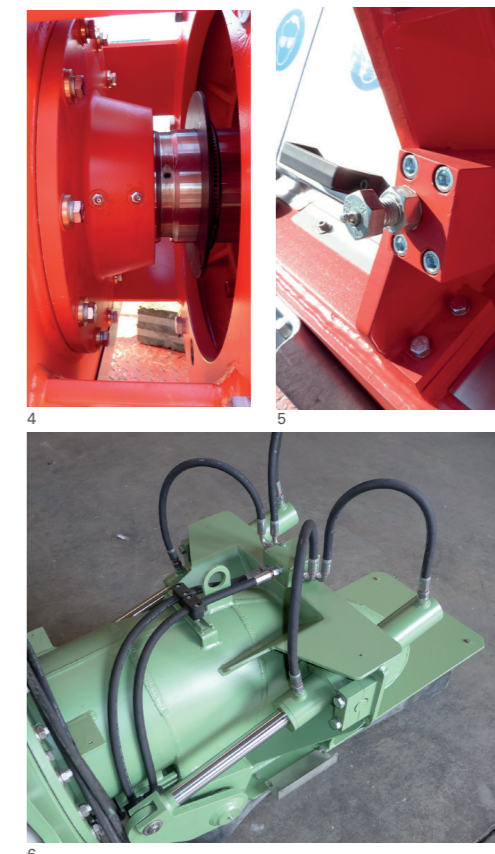
Efficient dewatering operation

The Thöni screw press represents the best and optimum compromise between price, performance and stability when it comes to the dewatering of the substrate. Due to the typical substrate properties, no flocculating agent is required.

4 Swimming seal for the compensation of radial movements
5 Stripping plate for optimum material feed / 6 Hydraulically operated flap gate made of wear-resistant steel



1 Entry area feed hopper / 2 Gear tooth coupling drive shaft screw / 3 Screening section with opened cover plates



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