SDE 405

Screw Press for Wastewater Treatment

THE PRODUCT

SDE 405 is a screw press: inclined bowl with made of moving and stationary discs, continuous discharging of sludge through screw conveyor, variable screw speed and torque power.

THE APPLICATION

SDE 405 has been designed by HAUS for dewatering in waste water treatment facilities and ensures obtaining high dryness.

SPECIAL FEATURES

SDE 405 adjusts compression rate in accordance with amount of solid. SDE 405 consists of the appurtenances made out of moving and stationary discs, strong chassis that support appurtenances and safety components. The appurtenances made out of moving and stationary discs allow easy cleaning and prevent clogging. The Screw has a gradually narrows design to ensure more infiltration in the beginning and more compression in the end. The SDE 405 has an extra bunker for muddy water which infiltrates at the last sector. That muddy water can be pumped to the condensing tank. Five point washing system which is automatically controlled, ensures the bowl is always clean with small amount of water. The motor is driven by frequency converter, which allows smooth start/stop, rotational speed regulation and power control. The solid output automatically controlled by pneumatic pistons to arrange variable solid content extraction to ensure high dryness with low energy consumption. The system controlled by a PLC.

All parts which belongs SDE 405 made of high grade stainless steel. At the solid output side of the screw, conveyor tips equipped with polyethylene material to sweep solids from inner wall of bowl. Polyethylene material can be changed if necessary.

APPLICATIONS

- Municipal WWTP
- Industrial WWTP

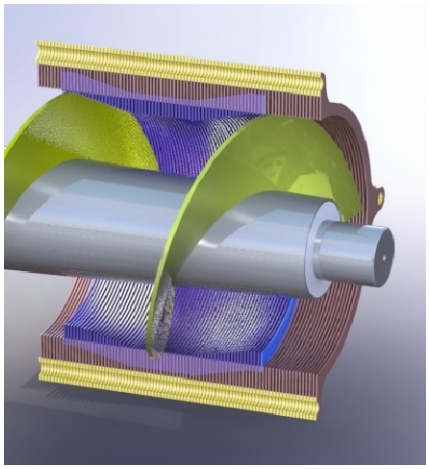
HIGHLIGHTS

- Moving and stationary discs
- Easy Cleaning
- Automatic Washing
- Low Energy Consumption

HAUS
CENTRIFUGE TECHNOLOGIES

OPERATING PRINCIPLES

The flocculated waste water feed into the bowl and moves through the inclined bowl with the screw rotation. Flocculated solids dewatered by the moving discs, while the water infiltrates between the disc gaps. Solids move through the bowl, while dewatering. At the end of the bowl solids pressed by the pressure cone, extracts water from solid and highly dewatered solid obtains. Last sector of the bowl infiltrates muddy water which can be pumped to the condensing tank. Cleaning by spraying pressurized water on the drum is automatically provided at periodic intervals. Where the amount of solids change, conical pressure plate automatically adjusts the compression rate of solid output and ensures maximum dryness.



STANDART CONFIGURATION

- Screw Press standalone unit
- Control Panel standalone unit
- Set of spare parts for
- Operator manuals

OPTIONALS

- Concentration Tank
- Polymer Tank
- Polymer Pump
- Sludge Pump
- Flow meter and other flow control devices

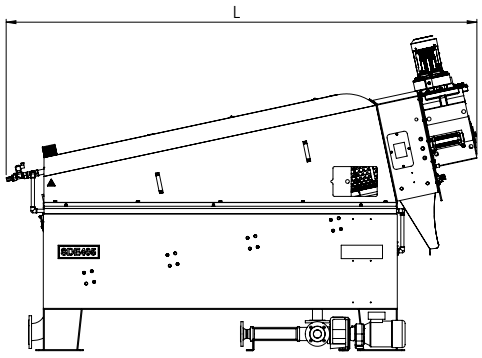
TECHNICAL DATA

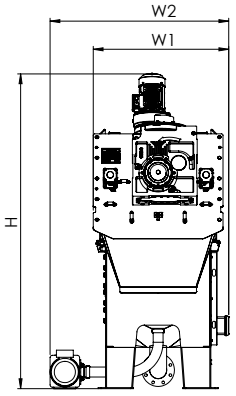
Dried Solid Capacity (kg/h)	120-150*
Screw Press Motor Power (kW)	1,1
Recirculation Pump Power (kW)	1,5
Screw Speed (rpm)	0 – 2,5
Washing Water Consumption (l/h)	20*
Washing Water Pressure (bar)	4-6
Pneumatic System Working Pressure Range (bar)	2-6
Noise Level (dB)	< 60
Main Dimensions (LxW1xH)	3190x920x2120
Main Dimensions (LxW2xH)	3190x1210x2120
Total Weight (kg)	1500

* May vary depending on the type of sludge.

MAIN MATERIALS

Bowl Body	AISI 304
Screw Conveyor	AISI 304
Screw Conveyor Tip	Polyethylene
Casing	AISI 304
Chassis	AISI 304
Frequency Inverter	DANFOSS
MCC and DCC Panels	Electrostatic Painted, IP:54
PLC	SIEMENS S7-1214C
Touch Screen	SIEMENS 7" KTP 700 PN





CUSTOMER SATISFACTION

USER FRIENDLY

RELIABLE & QUALIFIED SERVICE

CONTINUOUS SERVICE

ORIGINAL SPARE PARTS