



SEPARATOR

Industrial Press Screw Separator



The construction of the NOCK industrial press screw separator

The NOCK industrial press screw separator is made up of the following components:

- resistant cast iron machine casing with inlet chamber
- infeed for the liquid which is to be separated
- outlet connection with square flange for the filtered effluent
- fine slotted, robust screen cylinder made of stainless steel
- double-thread press screw made of stainless steel with precise fitting on the screen
- geared motor with protective cover
- outlet for solids made of stainless steel; covers with stepless adjustable, spring suspended controller for output to regulate the residual moisture content
- underframe / mounting frame made of stainless steel



Options:

- different slot widths: 0.25 - 0.50 - 0.75 - 1.00 mm
- integrated cleaning system
- hopper to feed pulp or semi-fluid substances

The functional principle of the NOCK industrial press screw separator

The NOCK industrial dewatering press separates water from solids.

It operates continuously and automatically according to the press screw separator principle and separates thin and viscous compounds.

The solid matter/ liquid compound is pumped from the inlet chamber by the press screw into the horizontal screen. Some of the water flows due to the force of gravity through the screen. The press screw conveys the rest of the water with solid particles (also smallest particles) into the press zone in the last section of the screen. **Here a permanent regenerative, compact solid matter is generated which is pressed out through the outlet of the machine** and then can be easily filled into containers. The separated fluid flows through the outlet underneath the machine. On the grounds of narrow tolerances the inside of the screen is permanently kept clean.

When handling fatty or oily wastes, the machines can be optionally fitted with a cleaning system in the separator casing: Hot water is injected in intervals of 15 to 20 minutes, to prevent congestion in the screen.

The economical solution to treat industrial waste water, process water, slurry and watery waste

The advantages of the press screw separating procedure

- efficient separating performance (solid content at inlet from ca. 1 %)
- high throughput
- dewatering and compaction of solids
- considerable reduction of waste volume
→ reduction of dump volume and fees
- easy transport and storage of the dry solids
- solid recycling, fiber recovery
- disposal of the separated water into the drain generally possible
- re-use of process water possible
- separation of a substantial portion of oil and fat
- reduction of odour
- energy efficient
- reduction of chemical input in flotation systems
- reduction of environmental impact



Dewatering and compression of fish waste



Slurry and waste water from animal stalls and truck washing areas



Filtered waste water



Pretreatment for the flotation

Manifold application

- **slaughterhouses:** e.g. separation of paunch and gut contents
- **meat industry:** wastewater treatment
- **food industry:** e.g. separation of vegetable matters
- **biogas plants:** separation before and after fermentation
- **agriculture and stock breeding:** separation of slurry
- **distilleries and breweries:** dewatering of mash and malt residuum
- **pulp and paper industry:** wastewater treatment



Separated solid

Made in Germany

Why to buy a NOCK SEPARATOR

- solid function
- easy handling
- use of high quality materials and components
- **robust and durable construction**
- servicefriendly construction: easy removal of outlet for solids, screen and press screw
- reliable sealing between separator casing and geared motor
- **Made in Germany**
- cleanouts
- optionally integrated cleaning system



Filtered waste water

Technical data NOCK SEPARATOR

model	motor performance (kW)	electrical connection	slot widths of screen (mm)	throughput max. (m ³ /h) ^②	overall dimension D x W x H (mm) ^③	weight (kg)
NOCK Separator SP 254/1	4,0	3 AC 400/230V - 50 (60) Hz ^①	0.25	18	2000 x 750 x 950	450
			0.50	35		
			0.75	45		
			1.00	60		

① other voltages upon request

② The mentioned performance depends on factors of wastewater like dry matter content, consistency etc.
Machines with more or less throughput upon request.

③ without supply pipe or hopper

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