

PRESSURE PLATE FILTER (PF)

Fully automatic clarifying filtration for highest process reliability

TRANSFORMING MATERIALS INTO VALUE



VERSATILE PROCESS TECHNOLOGY

Producing clear filtrates.



Precoat filtration

Separating suspensions with low solids content.



Adsorption with activated carbon

Purification of liquids.



Filter cake washing

Single- or multi-stage displacement washing.



Solvent extraction

Filter stripping by applying steam.



Heel filtration

Filtering the entire batch.



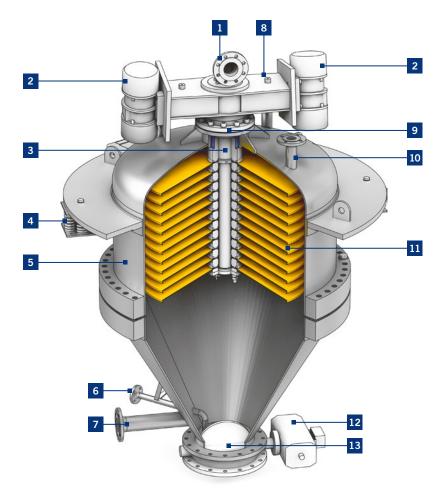
Slurry discharge - dry discharge

Application specific integration into the overall process.



PERFECT SOLID-LIQUID SEPARATION

Compact design for high flow rates.



Filter design

- 1 | Filtrate discharge
- 2 I Vibration motor
- 3 I Hollow shaft
- 4 | Spring insulators
- 5 | Pressure vessel
- 6 I Container emptying
- 7 I Suspension feeding
- 8 I Drive head
- 9 | Static sealing
- 10 | Compressed gas feeding
- 11 | Plate stack
- 12 | Filter cake discharge
- 13 I Discharge flap

The **pressure plate filter** is batch-operated. Slightly conically plate-shaped filter elements are horizontally arranged as a plate stack in a pressure vessel. The top surface is covered with the filter cloth on which the solids build the filter cake. As the suspension is pumped with pressure into the filter the generated pressure difference forces the filtrate through the filter cloth into the central collecting pipe. The pressure plate filter is a compact unit, operates fully automatically, and delivers high flow rates.

Advantages

- Fully automatic operation
- High system safety through static sealing principle
- Homogeneous cake structure through horizontal arrangement of the filter plates
- Reliable cake discharge through defined vibration of the plate stack

TOP PERFORMANCE IN EVERY DETAIL

Benefit from superior technology.



1 | Safe filtration process

- Gas-tight system
- Differential pressure up to 10 bar g
- Inert or sterile atmosphere
- Hygienic production



2 | High plant safety

- Robust design
- Shaft sealed by static radial action sealing sleeve
- Suitable for demanding operating conditions



3 | Energy efficient and low maintenance

- Low-energy cake discharge
- Efficient vibration motors
- Maintenance optimized design
- Low operating costs



4 | Modular system concept

- Quick commissioning and system integration
- Unified automation concept
- Low engineering costs using standardized components



Further information

www.bhs-sonthofen.com/pf

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