

BOKELA Precoat Drum Filter



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BOKELA Drum Filters

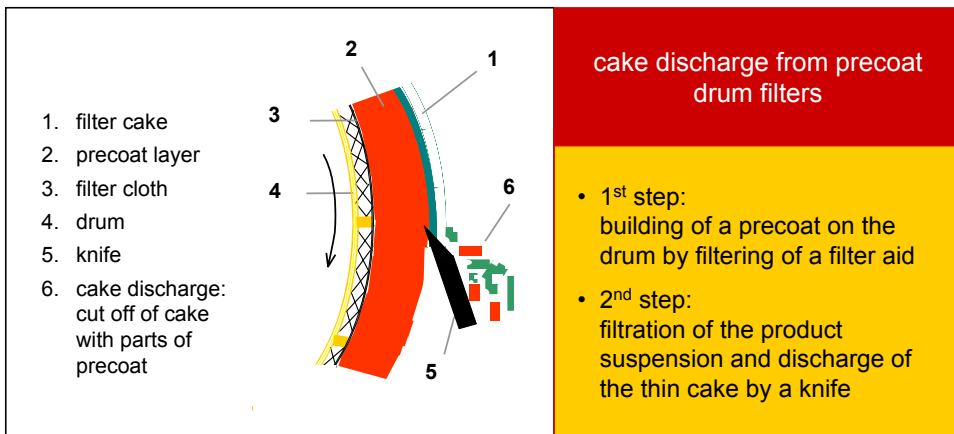


- have an individual design with innovative features
- are adapted to the process and product requirements
- have superior hydraulic characteristics ensuring
 - a high performance capacity
 - an excellent cake washing
 - a complete cake discharge
- are applied in the minerals, salt, ore, chemical, pharmaceutical and food industry

BOKELA Precoat Filters



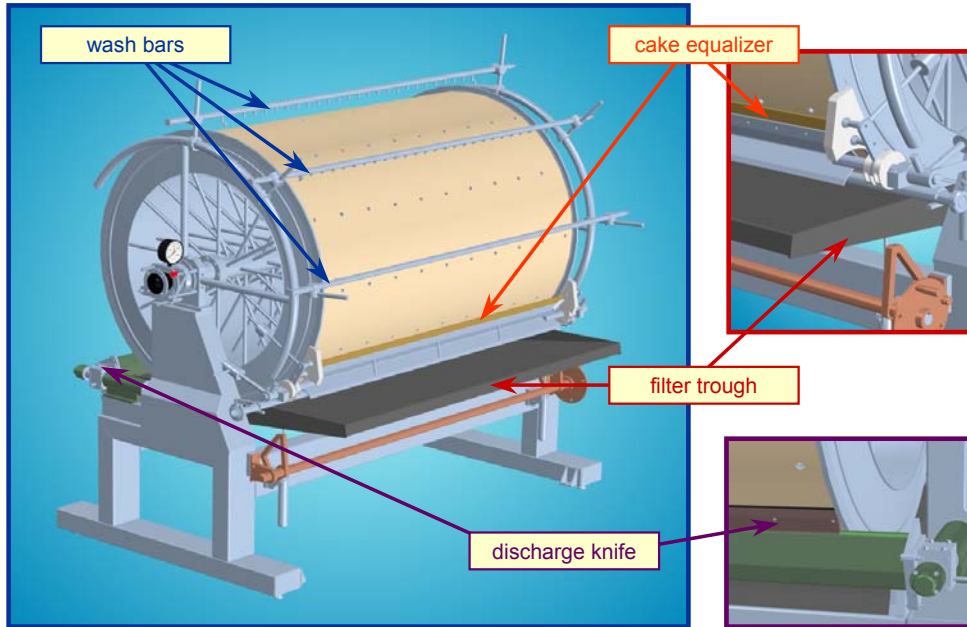
- for the purification of liquids
- for the filtration of very thin filter cakes ($h_C \leq 0.1 - 1$ mm) e. g. yeast



BOKELA Precoat Filter Filter Design



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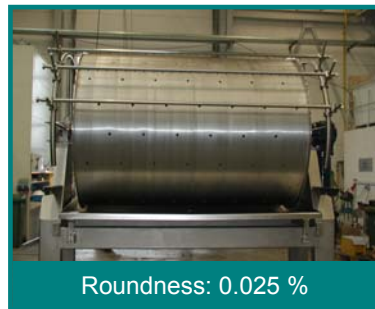
BOKELA Precoat Filter Filter Design



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- Filter equipped with:
- cake washing
 - cake equalizer
 - liftable filter trough



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BOKELA Precoat Filter Filter Details



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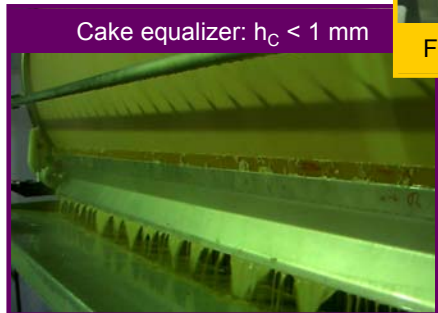
Filtrate piping inside the drum



Liftable filter trough



Filter cloth fixation



Cake equalizer: $h_c < 1 \text{ mm}$

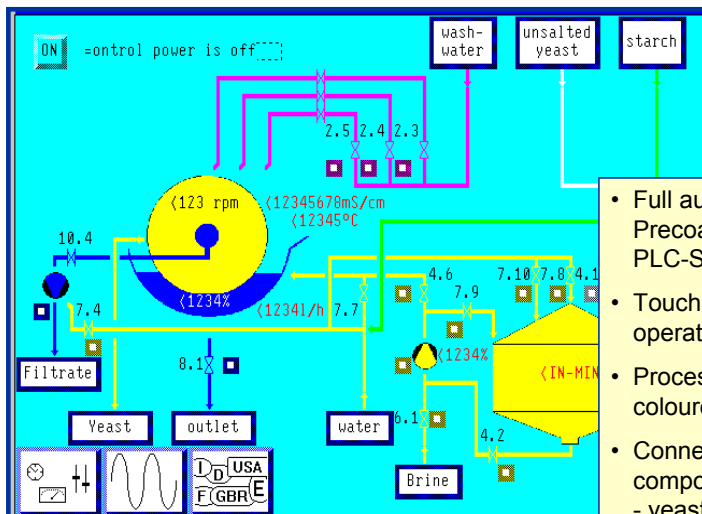


Cake discharge with knife
(knife feed: $25 \mu\text{m}$)

BOKELA Precoat Filter Filter Automation



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Example: yeast filtration

- Full automatic operation of Precoat Filter station with PLC-System
- Touch screen for filter operation
- Process visualisation on coloured control panel
- Connection of peripheral components like:
 - yeast cream tank
 - salt dosing system
 - vacuum pump

BOKELA Precoat Filter Filter in Operation



Filtration area: 16 m²

Product: yeast

BOKELA Precoat Filter Special Features



- High roundness
→ optimal process operation
- High number of internal filtrate pipes
→ optimal hydraulic efficiency
- Low knife feed motion
→ minimum precoat consumption
- Quick knife motion
→ quick filter start and stop
- Knife complete made of stellite
→ long lifetime and low maintenance
- Wide filter speed range
→ easy adjustment to product and product quality

- Easy adjustment of trough level
→ quick filter start and stop and good accessibility
- Optimal filter cloth fixing
→ optimal sealing of the cloth to the board ring
- Flexible control system
→ easy of use and easy adjustment to the product
- Effective wash water distribution
→ minimum wash water consumption
- High quality equipment
→ manufacture according to GMP guide lines

BOKELA Precoat Filter Performance Data



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Filtration of Yeast		
Pressure difference	[bar]	0.95
Filter speed	[rpm]	2.5 – 25
Wash water ratio	[m ³ _{ww} / m ³ _{slurry}]	0.15
Filtration cycle	[h]	18 – 24
Slurry throughput	[m ³ /m ² h]	0.5 – 0.6
Precoat consumption	[mm/h]	0.9 – 1.0
Cake DS-content	[wt. %]	34
Salt content in cake	[%]	< 0.05

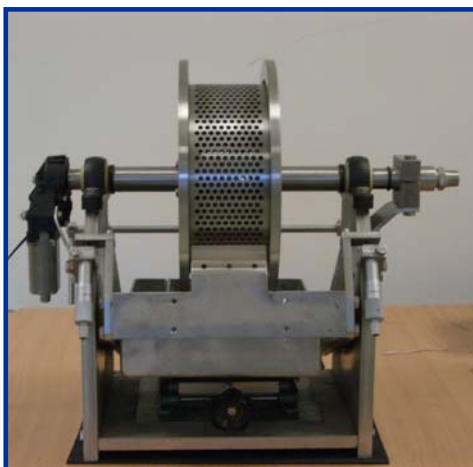
Filter Sizes
From 4 to 18 m ²

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BOKELA Precoat Filter Laboratory Test Equipment



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Filtration area: 0.05 m²
Drum diameter: 220 mm



In operation
Filter speed: 8 – 24 rpm
Manual knife feed: 10 μm steps

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