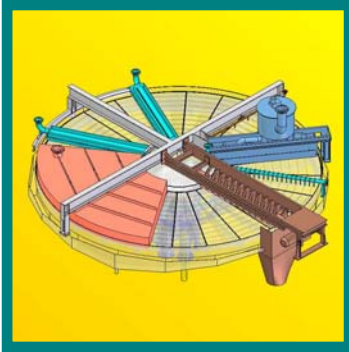


BOKELA Pan Filter



BOKELA



Rotary Vacuum Filters of BOKELA



The continuous operation, the high performance capacity and the low space demand make rotary filters the most economical solution for a wide range of solid-liquid separation tasks.



Disc Filter Boozer



Drum Filter



Pan Filter

BOKELA disc, drum and pan filters define a new state of the art in rotary filter technology and surprise with numerous innovations. The superior process and mechanical design result in

- high hydraulic capacity
- minimal pressure loss
- high filter speed
- homogenous cake thickness
- 100 % cake discharge
- extraordinary high throughput capacity
- advanced process control system
- safe operation and high flexibility

BOKELA Pan Filter

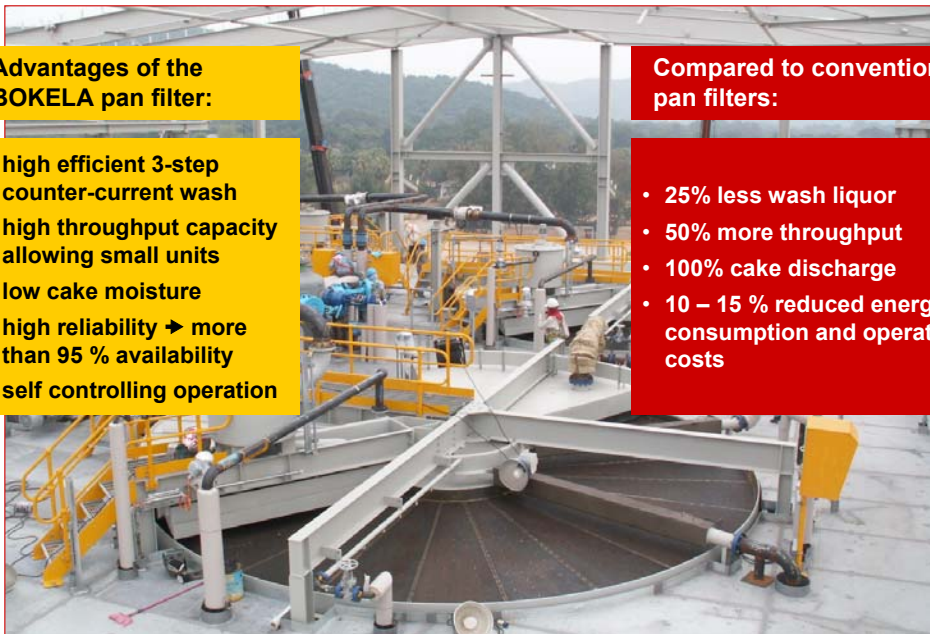


Advantages of the BOKELA pan filter:

- high efficient 3-step counter-current wash
- high throughput capacity allowing small units
- low cake moisture
- high reliability → more than 95 % availability
- self controlling operation

Compared to conventional pan filters:

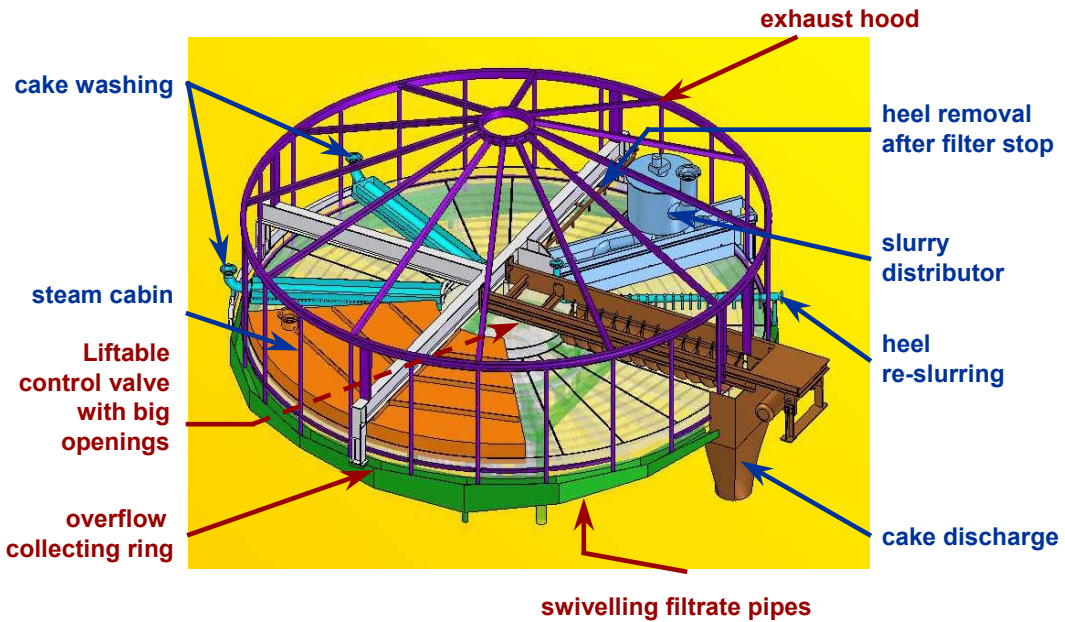
- 25% less wash liquor
- 50% more throughput
- 100% cake discharge
- 10 – 15 % reduced energy consumption and operation costs



General Arrangement of the BOKELA Pan Filter



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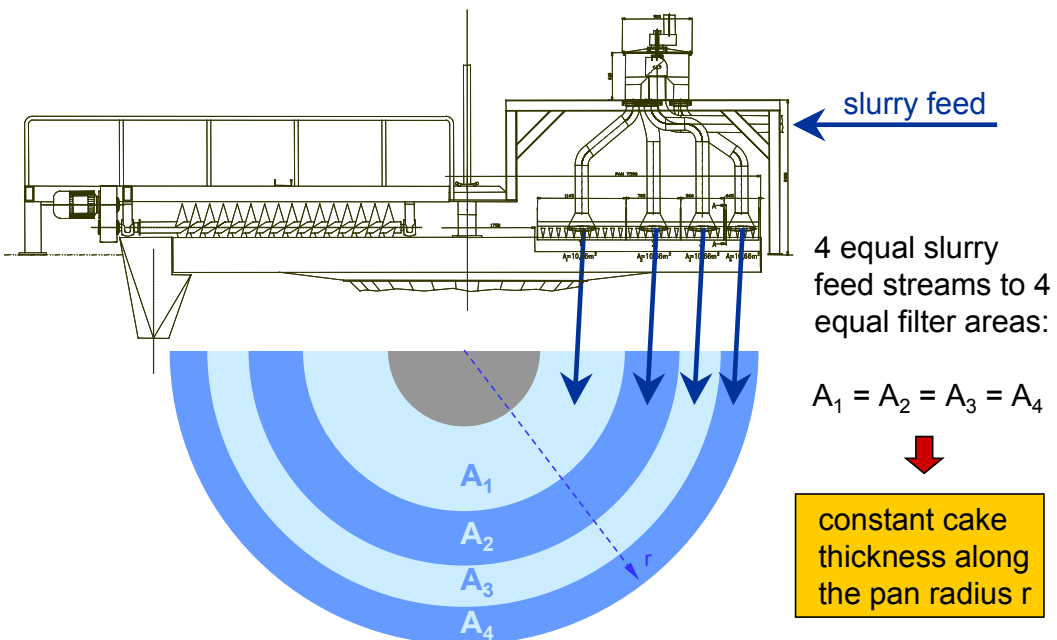


-3-

Forced Feeding System Even Slurry Distribution by Forced Feeding System

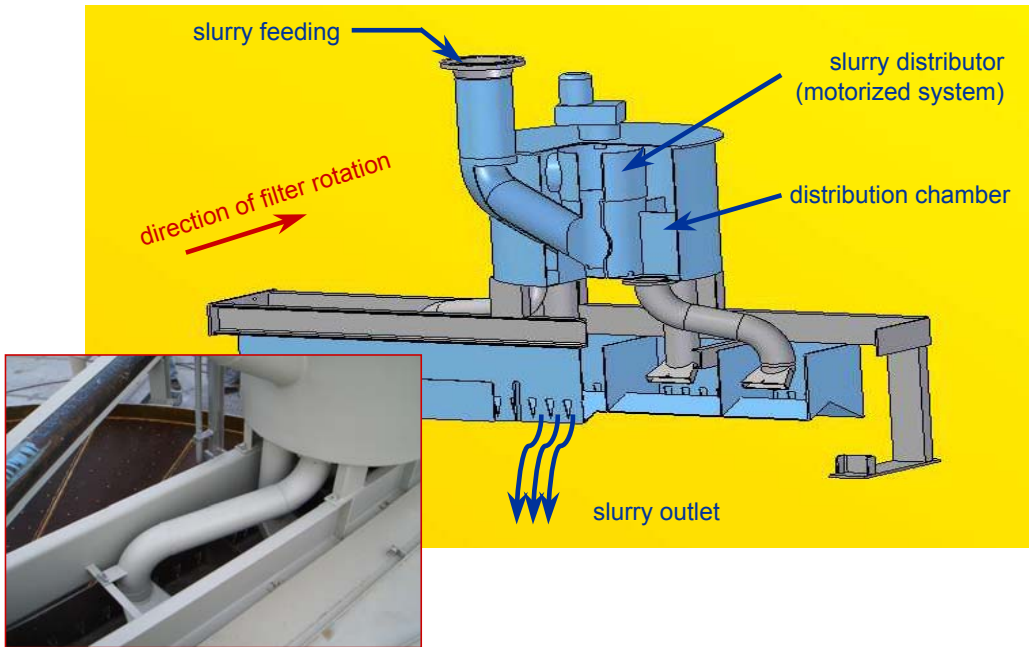


BOKELA

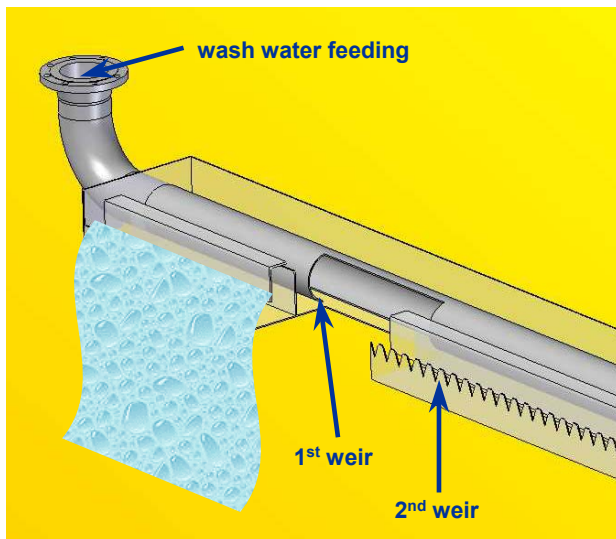


-4-

Forced Feeding System



Cake Washing

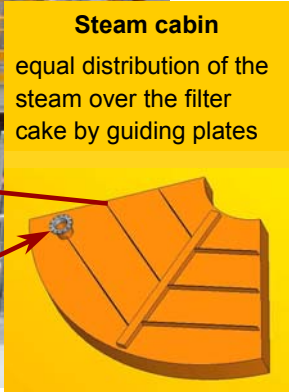
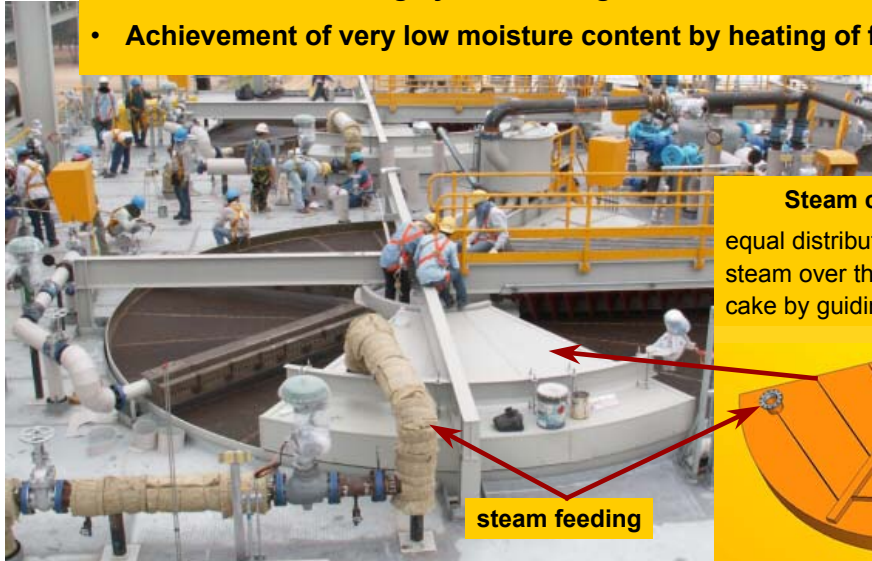


- Even distribution of wash water
- High wash water throughput
- Effective cake washing in 1 to 3 steps
- Counter current washing
- Adjustable position of wash system to adapt to individual requirements

Steam Cabin for Optimized Cake Washing and Dewatering

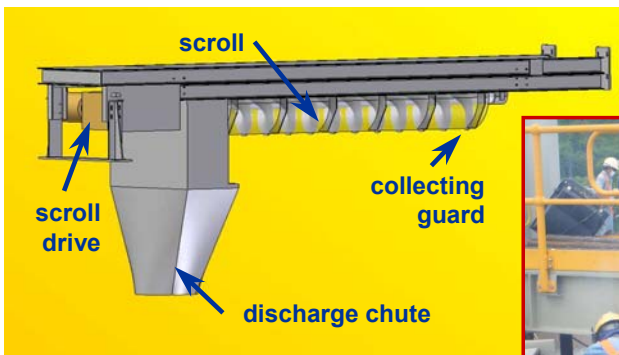


- Further cake washing by condensing steam in the filter cake
- Achievement of very low moisture content by heating of filter cake



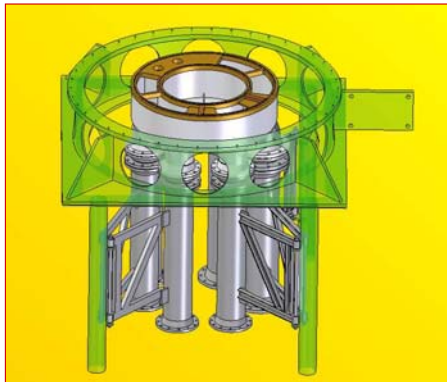
steam feeding

100% Cake Discharge by Controlled Discharge Scroll



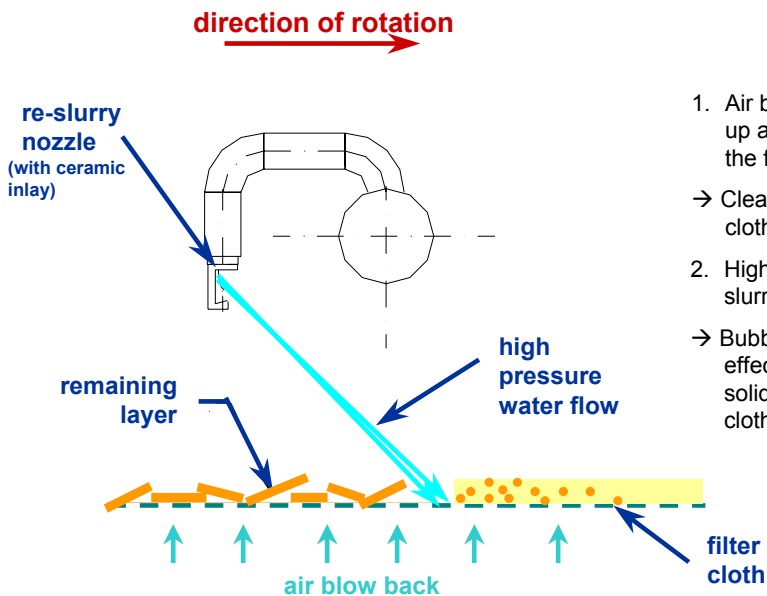
- Scroll speed related to filter speed (2nd control loop)
- Adjustable vertical position of the discharge scroll
- Scroll made of wear resistant material (high Mn content)
- Easy remove for maintenance purposes as one unit (complete with bearings and drive)

Swiveling Filtrate Pipes



- Filtrate pipes connected with hinge joints to the steel structure can be swiveled to the side
 - ➔ fast access to control head for maintenance work
- Easy lowering of control head by a spring loaded central spindle
- Easy replacement of wear plate or adaptation of bridge blocks

Heel Removal by Re-slurry



1. Air blow back for breaking up and lifting the cake from the filter cloth
 - ➔ Cleaning of blinded filter cloth by air flow
2. High pressure water to re-slurry the remaining heel
 - ➔ Bubbling effect helps to effectively re-slurry the solids and to clean filter cloth

Heel Removal by Re-slurry



Advantages of a continuous and intensive heel re-slurry:

- Equal cake height over the filter cell
 - ⇒ better washing of solids / lower residual moisture
- Longer cycle times between required cleaning of filter (2-3 times longer)
- Longer filter cloth life time
 - ⇒ less change of filter cloth
 - ⇒ less cost for operator manpower and material
- ➔ **Higher availability of filter**



BOKELA Pan Filter Sizing



filter type	[-]	S	M	L	XL
pan diameter	[m]	5.8	7.7	8.6	9.6
filtration area	[m ²]	25	43	54	68
slurry feed	[-]	forced distribution for homogeneous cake thickness			
filter speed	[-]	up to 2.0 rpm (variable) with cake thickness control			
cake discharge	[-]	scroll with speed control			



www.bokela.com

BOKELA GmbH

Tullastr. 64
76131 Karlsruhe
Deutschland

Tel.: +49 721 96456-0
Fax: +49 721 96456-10
bokela@bokela.com

BOKELA Australia Pty

Building 5 Spring Lake Commercial
1 Springfield Lakes Blvd
Springfield Lakes, QLD 4300
Australia

phone : +61 7 3288 1400
fax: +61 7 3288 1424
bokelaofaustralia@bokela.com

BOKELA do Brasil Ltda

R. Santiago Ballesteros 610
Sala 6, Cinco
32010-050 Contagem – MG
Brazil

phone: +55 31 2565 0976
fax: +55 31 2565 3976
bokeladobrasil@bokela.com