

## Vacuum disc filter

# for filtration of mineral suspensions



Modern coal beneficiation plants are becoming more and more complex as a result of efforts to increase the yield, improve the product quality, and minimize the water consumption and environmental impact.

This typically means: more separation stages, finer particle sizes, higher product dryness without thermal drying, higher recycling rates for process water, and efficient dewatering of tailings.

#### **Customer value**

ANDRITZ SEPARATION helps to save costs and increase profits by optimizing process and product quality, enabling water and energy reuse, and minimizing emissions:

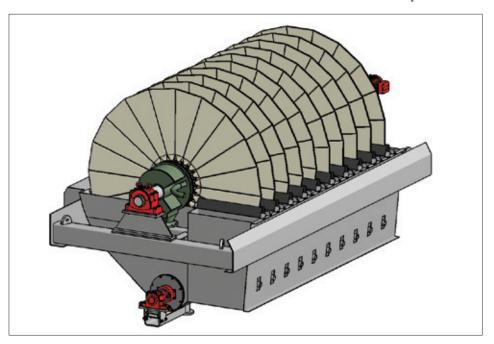
- Robust stainless steel design, improved filter bags, quick mounting of filter cells, and two-part control discs extend the service life and minimize maintenance efforts
- Highest specific throughput
- Clear filtrate

- High speed filtration combined with large diameter (> 3 rpm) boosts the throughput while maintaining a small footprint
- Ultra-thin stainless steel sectors minimize required system volume
- 20 or 36 filter cells minimize the specific volume and enlarge the cake forming zone



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Vacuum disc filter product range				
Number of discs	Disc diameter (m)	Filtration area per disc (m²)	Number of control heads	Filtration area (m²)
6	3	12	1 or 2	72
8	3	12	2	96
10	3	12	2	120
8	3.7	17.6	2	141
10	3.7	17.6	2	176
12	3.7	17.6	2	212
14	3.7	17.6	2	247
6 max.	5.2	36	1	216 max.
6 max.	5.6	42	1	252 max.
6 max.	6	50	1	300 max.

#### Standard design

Our standard design is based on using stainless steel for all components in direct contact with the suspension. The ultra-flat stainless steel cell design guarantees lowest system volume and not only increases the throughput, but also provides perfect cake discharge at top filter speed. Our latest filters are the result of more than three decades of experience.

#### **Material data**

- Standard filter trough is made of type 304 stainless steel (carbon steel for alumina)
- Ultra high density PE for control disc

#### **Special features**

- Filter discs with 20 segments each; welded design made of perforated stainless steel
- Filter trough with a submersion depth of up to 45%
- Filtrate collection pipes are arranged externally to the shaft with easy replacement guaranteed, even after many years in operation
- Efficient snap-blow cake discharge
- Filter bag cleaning with stainless steel spray pipes and central lubrication system

#### **Applications**

- Coal and iron ore
- Alumina and potash
- Non-ferrous

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