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:

- Required filter area minimized due to extremely high specific throughput
- Ultra-thin stainless steel sectors minimize system volume
- Smallest footprint
- Continuous operation with no need for an operator
- Pressures up to 6 bar allow large quantities of finest-grain suspension with high filtration resistance to be dewatered to lowest residual moisture
- Many times the throughput of vacuum systems and enhanced filtration at higher altitudes
- Minimized maintenance effort due to quick mounting of filter cells and two-part control discs
- Patented and well proven double-gate valve for filter cake discharge

www.andritz.com
Hyperbaric disc filter
for dewatering of finest-grain suspensions

Hyperbaric disc filter product range

<table>
<thead>
<tr>
<th>Number of discs</th>
<th>Disc diameter (m)</th>
<th>Filtration area per disc (m²)</th>
<th>Number of control heads</th>
<th>Filtration area (m²)</th>
<th>Pressure vessel diameter (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3</td>
<td>12</td>
<td>1 or 2</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>96</td>
<td>4,200 or 4,800</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>3.3</td>
<td>14</td>
<td>2</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>3.3</td>
<td>14</td>
<td>2</td>
<td>196</td>
<td></td>
</tr>
</tbody>
</table>

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. Hyperbaric filtration is the right solution for the advanced mining technologies required today.

Material data
- 20 stainless steel filter cells per disc
- Standard filter trough is made of type 304 stainless steel
- Ultra high density PE for control disc

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