BeltDoc

Doctoring solution for shoe press roll

Proper doctoring of the shoe press rolls enables more efficient nip dewatering as well as better cleanliness at the press section.

Valmet’s BeltDoc doctoring solution for different shoe press concepts increases the vacuum effect in belt grooves and thus prevents water rimming around the belt.

Enhanced doctoring

Valmet’s BeltDoc provides you with first-class doctoring result for shoe press rolls. The BeltDoc solution consists of a doctor which is integrated into the saveall. The doctor has a lightweight composite body and it provides easy and reliable doctoring also in space limited applications. In addition to the integrated doctor model, it is possible to use a doctor with a self-profiling blade holder, HDPE-blade and a beam made of steel.

In order to produce a high-class doctoring result, there is an internal sleeve support bar inside the belt loop. It effectively eliminates the belt unstabilities when doctor is loaded.

Main advantages

The BeltDoc doctoring solution has many benefits, proven in production situations:

- Increased dryness after press, improved moisture profile
  - Possible to use BlackBelt with v-type grooving (most efficient in dewatering)
  - Doctors nip water effectively to saveall
  - Possible to move to effective nip dewatering instead of uhlebox dewatering
    - Energy savings as UhleBox vacuum can be lowered or eliminated
  - Improved cleanliness for increased machine uptime
    - Eliminates misting around the shoe press roll
    - Minimizes contamination of frames
    - Enables decreased break sensitivity

- Longer felt service life-time
  - Decreases felt plugging
  - Eliminates backsplash from ingoing side of nip, which plugs felts

- Full scope package with service and belts
  - Most economical and best payback can be reached

Case example:
Two per cent higher web dry content

The customer’s target was to increase web dry content and improve runnability under the SymPress B press section. A BeltDoc with saveall was mounted close to the felt. This made it possible to increase linear load from 700 kN/m to 850 kN/m.

<table>
<thead>
<tr>
<th>Action</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher linear load</td>
<td>1.5% web dry content increase after press</td>
</tr>
<tr>
<td>BeltDoc &amp; saveall</td>
<td>0.5% web dry content increase after press (checked from</td>
</tr>
<tr>
<td>Machine speed</td>
<td>55 m/min increase</td>
</tr>
<tr>
<td>Dry content</td>
<td>2% higher</td>
</tr>
<tr>
<td>Bulk</td>
<td>No difference</td>
</tr>
</tbody>
</table>