Improved suction roll dewatering

Valmet Suction Roll Upgrade Shell Flow

Effective internal cleaning systems ensure the reliable operation of suction rolls. Valmet Suction Roll Upgrade Shell Flow washes suction roll shell through-holes on the machine. Clean shell holes ensure uniform dewatering of the paper web, which helps to keep sheet moisture profiles consistent throughout the roll change interval improving roll operating reliability and paper machine runnability.

Benefits

- More uniform paper web moisture profiles
- Extended shell, cover, and axial seal lives
- Extended roll change intervals
- Fewer web breaks
- Reduced buildup and calcification

Improved moisture profiles and extended service intervals

Suction roll shells through-holes can gather much buildup. The buildup will clog the roll shell through-holes, which will impact paper web dewatering. Uneven dewatering has a direct effect on the paper web’s moisture profile.

In the worst case, rolls need to be changed due to deteriorating moisture profiles. Couch rolls and press suction rolls are particularly prone to clogging, given their long, small-diameter suction holes. Shells can be kept cleaner with the help of Shell Flow upgrade shower pipes.

Better shell cleanliness by cleaning the shell from inside-out

Effective Shell Flow upgrade cleans shell through-holes from inside-out. When shell through-holes are cleaned from inside-out, both water pressure and centrifugal force of the rotating shell are working towards the same direction to provide a powerful cleaning effect. The buildup is thrown out from the roll to the saveall and transferred to the filtration systems.

Valmet - Offering upgrades on existing components with modern features based on customer needs to enhance performance and productivity.
Flush-through design for extended shower pipe operation

Valmet Suction Roll Upgrade Shell Flow shell cleaning shower is delivered with flush-through design when there’s enough space inside the suction roll. Flush-through design allows pipeline flushing while the roll is on a machine. Pipeline flushing performed e.g. once a week keeps the upgrade operative between the planned maintenance operations.

Regardless of original make or model, Shell Flow upgrade can be fitted to most suction rolls and is the perfect solution to keep suction roll shell through holes clean and open.

<table>
<thead>
<tr>
<th>Valmet Suction Roll Upgrade Shell Flow technical data</th>
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<td>Typical shell cleaning pressure</td>
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<td>Typical water consumption</td>
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<td>Recommended water filtration rate</td>
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Note: For the most demanding applications Valmet recommends Shell Flow H upgrade - a high pressure oscillating shell cleaning shower.