Valmet Press Roll Cover PF

Polyurethane roll covers for pressing applications

Valmet Press Roll Cover PF is a long-lasting cover with dependable quality for all kinds of pressing applications.

Applications
• Felted press rolls
• Non-felted press rolls
• Suction press rolls
• Tissue press rolls
• Tissue suction press rolls
• Suction pick-up and transfer rolls
• MG cylinder press rolls

Topography options
• Plain, grooved, blind-drilled and suction-drilled

Cleaning
Washing with plain or soapy water or a sodium hydroxide solution is recommended. The cover may be wiped clean with an aliphatic hydrocarbon solvent. A hand-held washer or oscillating high pressure shower may also be used. The maximum pressure allowed, from a distance of 100 mm (4") or more and with a dispersing nozzle, is 6 MPa (= 60 bar = 870 psi) if the cover is softer than 15 P&J, or 8 MPa (= 80 bar = 1160 psi) for harder covers.

Valmet Press Roll Cover PF

<table>
<thead>
<tr>
<th>Cover color</th>
<th>Hardness</th>
<th>Cover thickness</th>
<th>Maximum temperature</th>
<th>Surface roughness</th>
<th>Maximum loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF</td>
<td>Red</td>
<td>5–25 P&amp;J</td>
<td>15–25 mm (0.60–1.00&quot;)</td>
<td>105°C (220°F)</td>
<td>Ra &lt; 3.2 µm (120 µin)</td>
</tr>
<tr>
<td>PF-V</td>
<td>Red</td>
<td>5–25 P&amp;J</td>
<td>15–25 mm (0.60–1.00&quot;)</td>
<td>105°C (220°F)</td>
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</tr>
</tbody>
</table>

Benefits
• Superior durable bonding
• High temperature ratings
• Excellent wear resistance for longer operation, no need for drying
• High load ratings
• Very low hysteresis-induced heat buildup
• Excellent resilience for optimal nip performance
• Optimized surface topography for maximized dewatering
**Patching and repair**

Patch repair may be considered in the case of smaller surface problems. Please consult Valmet.

**Chemical resistance**

Excellent resistance against all normal process chemicals. Recommended pH range 4 to 9. Avoid long exposure to strong alkalis and acids or alcohols.

**Doctoring recommendations**

- Polyethylene doctor blades may be used for doctoring
- Ask Valmet for blade recommendation
- Blade angle: 20°
- Blade load: 90–140 N/m (0.5–0.8 pli)
- Oscillation is not required but is preferred in some demanding applications

**Cover drying**

No specific instructions for this cover.

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**Transportation and storage**

When a roll is shipped in cold weather (below 5°C / 40°F), it is advisable to leave it in its transportation packaging and let it warm up slowly for at least 24 hours. Sudden temperature changes may damage roll covers. Store rolls in a dry roll storage room at a temperature of 10 to 30°C (50 to 86°F). Always support rolls by their journals. Protect the entire covered surface of rolls with a layer of paper or cardboard. Never rest rolls on their cover.

**Crowning and tapering**

Regarding crown and tapers, follow primarily original cover and roll design. If modifications are needed, consult your roll service representative.

Unless otherwise specified, the standard taper of press roll cover will begin one-inch (1” or 25 mm) outboard of the sheet edge and is 1.5 mm on diameter per 100 mm taper length (3/8” inch on diameter per foot of taper length). Tapers must be reconditioned during regrounding.

**Roll cooling**

Rolls used in press roll positions may be equipped with internal water cooling to balance their temperature and to prevent profile changes due to temperature variations across the length of the roll. The inlet water temperature should remain above 35°C (95°F), and preferably close to the process temperature. The maximum outlet water temperature should be below 65°C (150°F). The inlet and outlet temperature should be within 10°C (18°F) of one another. On deflection compensated rolls maximum allowed return oil temperature is 75°C (167°F).