<table>
<thead>
<tr>
<th>Properties</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low residual moisture in the filter concentrate</td>
<td>Reduction of cooling lubricant cost</td>
</tr>
<tr>
<td>Continuous filter belt</td>
<td>Reduction of consumption and disposal costs</td>
</tr>
<tr>
<td>Scaling of the filter area with the same base area</td>
<td>Space-saving installation</td>
</tr>
<tr>
<td>Up to 3 filter modules per system</td>
<td>• Later expansion possible</td>
</tr>
<tr>
<td></td>
<td>• Redundant layout possible</td>
</tr>
<tr>
<td></td>
<td>• Different filter qualities possible</td>
</tr>
</tbody>
</table>

**Application**

The vacuum filter VLO is designed for cleaning cooling lubricants (KSS) for grinding processes.
- Ideal for section and gear grinding with oil
- Local use for a single machine or centrally for several machines

**Description**

**Filtering process**
1. A lift pump conveys the waste fluid into the intake box
2. Having been cleaned, the KSS flows through the continuous roll into the filter chamber and subsequently into the clean tank
3. A filter cake is formed on the continuous roll which, as a depth filter, retains the finest dirt particles

**Regeneration process**
1. The growing filter cake increases the flow resistance through the filter surface
2. The vacuum in the filter chamber increases
3. When the level reaches a defined threshold value, the belt drive cuts in and conveys the continuous roll a little further
4. The continuous roll without filter cake reaches the filter surface; the volume flow through the filter chamber increases again
Diagram

- Intake box
- Filter chamber
- Back-flush unit
- Lift pump
- Unfiltered coolant tank
- Filtering phase
- Drying section
- Filter cake
- Continuous roll
- Filter module 3 (optional)
- Filter module 2 (optional)
- Filter module 1
- Belt drive
- Brushing roller
- Filter pump
- Vacuum pump
- Supply pump(s)
- Sludge box
- Clean tank
- Supply pump(s)
- Filter module 2
- Filter module 3 (optional)
- Fill level measuring technology i.a.w. WRA

Equipment

- Vacuum pump ●
- Filter pump ●
- Fill level measuring technology ●
- Belt drive ●
- Continuous roll ●
- Brush-off unit ●
- Control system ○
- Mud carrier or mud box ○
- Railing with ladder ○
- Cooling lubricant tank system with lifting and supply pump(s) ○
- Temperature control (cooling/heating) ○
- Filter module 2 ○
- Filter module 3 ○
- Fill level measuring technology i.a.w. WRA ○

● Basic equipment
○ Optional
Dimensions and technical data

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. filter capacity (l/min)(^1)</th>
<th>L</th>
<th>B</th>
<th>H</th>
<th>Vmax [l]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil(^2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>VLO 300-1</td>
<td>300</td>
<td>3400</td>
<td>2100</td>
<td>800</td>
<td>2850</td>
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<tr>
<td>VLO 300-2</td>
<td>600</td>
<td>3400</td>
<td>2100</td>
<td>1000</td>
<td>5700</td>
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<tr>
<td>VLO 300-3</td>
<td>900</td>
<td>4000</td>
<td>2100</td>
<td>1200</td>
<td>8400</td>
</tr>
</tbody>
</table>

Dimensions without specification of units in mm

1. Approximate values for profile grinding (roughing, smoothing) of hardened steel. Other cooling lubricant viscosities, processing methods and materials increase or reduce the specified values

2. \( v = 20 \text{ mm/s} \) (at operating temperature)