### Properties

<table>
<thead>
<tr>
<th></th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Chip separation via cyclone separator | • No consumables  
|                         | • Maintenance-free  
|                         | • Low operating costs                          |
| Continuous operation   | • High separation rates up to > 98%           |
|                         | • Degassing effect on cooling lubricants       |
| Space-saving configuration on existing conveyor | Can be retrofitted at any time |
| Independent control unit | No interference with existing control systems required |

### Application

KNOLL chip separators CS are devices for separating short chips, which the conveyor of a hinged or slat conveyor cannot hold back.
- Use as pre-separator for reducing the chip carryover to a downstream cooling lubricant (CL) filter
- Use as independent cleaning unit for low purity specifications of the CL
- Suitable for chips from a density of 2.7 g/cm³ in water-based CL

### Description

**Main functions**

**Separation**
1. The lift pump conveys the chip/CL mixture tangential to the chip separator
2. The centrifugal force conveys the chips outwards (primary vortex) before they go down into the chip bunker
3. A secondary vortex rises upwards and the CL leaves the CS for CL treatment

**Draining**
1. Cyclical opening of drain valve
2. Accumulated chips are flushed from the chip bunker onto the conveyor belt

**Combination options**

For further requirements, on request we combine the chip separator with
- Conveying systems for transporting the chips
- Filter systems for cleaning the cooling lubricants and supplying the machine tool
Equipment

- Chip separator ●
- Console with fill and blow down piping ●
- Analog fill level sensor ●
- Control valve ●
- Lift pump ○
- Separator control cabinet ○
## Dimensions and technical data

### CS 270

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of chip separators</th>
<th>Cycle emulsion (max. l/min)</th>
<th>Operating pressure inlet</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 270</td>
<td>1</td>
<td>270</td>
<td>1.4 bar</td>
<td>335</td>
<td>503</td>
<td>1043</td>
<td>470</td>
</tr>
<tr>
<td>CS 270-2</td>
<td>2</td>
<td>540</td>
<td>1.4 bar</td>
<td>625</td>
<td>1083</td>
<td>1235</td>
<td>595</td>
</tr>
</tbody>
</table>

Dimensions without units given in mm.