Correct measurements can only be taken with blades thoroughly mounted on the cylinder.

**PRELIMINARY WORKS**

- Dismount cylinder from machine
- Clean cylinder properly
- Ensure that the cylinder sits properly on the stands and can be rotated easily when resting on the bearings or flanges

**Take the following tools for measuring**

<table>
<thead>
<tr>
<th>Tool</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring Tape (metric system)</td>
<td>Video 02:30min</td>
</tr>
<tr>
<td>Sliding caliper (metric system)</td>
<td>Video 02:41min</td>
</tr>
<tr>
<td>Depth gauge (flush pin gauge, metric)</td>
<td>Video 03:11min</td>
</tr>
<tr>
<td>Piece of chalk</td>
<td></td>
</tr>
<tr>
<td>Calculator</td>
<td></td>
</tr>
<tr>
<td>2 stands for supporting the cylinder so that it can be rotated easily</td>
<td>Video 07:47min</td>
</tr>
</tbody>
</table>
**Pitch**

- **Tools:** Chalk, Measuring Tape
- **Procedure:**
  - Pick one blade and mark it with chalk by sliding across the cylinder. Measure the distance from any given point of the blade to the next chalk mark lying in a straight 90 degree line along the cylinder surface.
  - **Video 02:13 – 02:40min**

- **Pitch:** [ ] mm

**Length of Blade**

- **Tool:** Measuring Tape
- **Procedure:**
  - Start at the end of the cylinder and stop in the middle of the cylinder at the other end of the blade.
  - **Video 03:19 – 03:26min**

- **Length of Blade:** [ ] mm

**Working Width**

- **Tool:** Measuring Tape
- **Procedure:**
  - Measure the distance between one end of the cylinder to the other end.

- **Working Width:** [ ] mm

**Blade thickness at the bottom**

- **Tool:** Sliding caliper
- **Procedure:**
  - Measure the blade thickness at the blade bottom after you have removed the blade from the cylinder.
  - **Video 03:46 – 03:50min**

- **Blade thickness - at the bottom:** [ ] mm

**Core diameter**

- **Tools:** Sliding caliper, Depth gauge
- **Procedure:**
  - Remove the blades from the cylinder. Clean the grooves to eliminate all kind of residual matter. Take the sliding caliper to measure the diameter of the cylinder. Ensure that you really measure on the top of the cylinder.
  - **Video 02:41 – 02:50min**
  - Use the depth gauge (flush pin gauge) to measure the depth of the groove.
  - **Video 03:12 – 03:17min**

- **Outer diameter:** [ ] mm
- **Depth of grooves:** [ ] mm
- **Core diameter: formula:** the outer diameter – (2 x groove depth) [ ] mm

**Number of right-hand winding blades**

- **Procedure:** Count the number of blades for each side of the cylinder separately.