ATLANTIC can now offer control wheels in B ED9 Bonding, a recently developed alternative to the widely used rubber or resin bonded control wheel. ATLANTIC B ED9 bonded control wheels are a definite prerequisite for a more economic method of manufacture, with particular regard to the ever increasing demands on workpiece quality i.e. roundness.

In particular, the extremely homogeneous structure within the grain-bonding matrix guarantees a constant and even pressure over the total grinding zone. Uneven wear of the control wheel, which results in variations in the workpiece geometry, is thus eliminated.

During the centerless grinding process, interruptions on the surface of the workpiece e.g. cross-holes, gear teeth, slots etc. have a profound influence on workpiece roundness. For such workpieces and instances with extremely high stock removal, the B ED9 bonded control wheel has universally proven that the increased demands of this complex grinding process have been met, and thus allow for a further productivity increase using the centerless grinding method.

*We recommend our vitrified bonded control wheels in in NK1 150E-Z11 V22 for extreme and severe applications.
### Thrufeed grinding

<table>
<thead>
<tr>
<th>Grade</th>
<th>Workpiece Requirements</th>
<th>Control Wheel Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>(workpieces with Ø &gt; 10 mm etc.)</td>
<td>NK1 120-B ED9</td>
</tr>
<tr>
<td>Medium</td>
<td>(workpieces with interrupted cut or Ø &lt; 10 mm)</td>
<td>NK1 120S-B ED9</td>
</tr>
<tr>
<td>Hard</td>
<td>(workpieces with interrupted cut and Ø &lt; 10 mm)</td>
<td>NK1 180S-B ED9</td>
</tr>
<tr>
<td>Bar grinding</td>
<td>(Steel industry)</td>
<td>NK1 120S-B ED9</td>
</tr>
</tbody>
</table>

### Plunge grinding

<table>
<thead>
<tr>
<th>Grade</th>
<th>Workpiece Requirements</th>
<th>Control Wheel Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>(workpieces with Ø &gt; 10 mm etc.)</td>
<td>NK1 120S-B ED9</td>
</tr>
<tr>
<td>Medium</td>
<td>(workpieces with interrupted cut or Ø &lt; 10 mm)</td>
<td>NK1 150S-B ED9</td>
</tr>
<tr>
<td>Hard</td>
<td>(workpieces with interrupted cut and Ø &lt; 10 mm)</td>
<td>NK1 180S-B ED9</td>
</tr>
</tbody>
</table>

### Control wheel outer diameter

<table>
<thead>
<tr>
<th>Available range of control wheel OD in [mm]</th>
<th>Commonly used control wheel OD in [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>from 100 to 406,4</td>
<td>100-200 (8” = 203,2)</td>
</tr>
<tr>
<td></td>
<td>220-225-230-250 (10” = 254,0)</td>
</tr>
<tr>
<td></td>
<td>270-280-300 (12” = 304,8)</td>
</tr>
<tr>
<td></td>
<td>315-330-340-350 (14” = 355,6)</td>
</tr>
<tr>
<td></td>
<td>360-400 (16” = 406,4)</td>
</tr>
</tbody>
</table>

Dimensions in ( ) = Inch sizes

### Control wheel width

<table>
<thead>
<tr>
<th>Available control wheel width in [mm]</th>
<th>Commonly used control wheel OD in [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>In one part</td>
<td>from 10 to 305</td>
</tr>
<tr>
<td>In 2 resp. 3 parts</td>
<td>&gt; 305</td>
</tr>
</tbody>
</table>

### Control wheel bore dimensions

<table>
<thead>
<tr>
<th>Common bore dimensions in [mm] and (Inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>127 (5”)</td>
</tr>
</tbody>
</table>

(Other bore dimensions available on request)