INTERNAL AND UNIVERSAL GRINDING MACHINE

ILD

ILD internal universal grinding machines provide high-precision machining for internal, external and face grinding of large workpieces. Depending on the requirements, the machines can be equipped with up to four grinding spindles and a measuring probe.

Spindle housings, shafts, tool holders, roller bearings, hydraulic components, aerospace components or machine-tool components can be machined with the ILD series using the latest technology.
### ILD Range

<table>
<thead>
<tr>
<th>ILD RANGE</th>
<th>ILD-400</th>
<th>ILD-600</th>
<th>ILD-700</th>
<th>ILD-700 U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. internal grinding diameter</td>
<td>420 mm</td>
<td>420 mm</td>
<td>500 mm</td>
<td>450 mm</td>
</tr>
<tr>
<td>Max. internal grinding length</td>
<td>400 mm</td>
<td>400 mm</td>
<td>400 mm</td>
<td>400 mm</td>
</tr>
<tr>
<td>Max. external grinding length</td>
<td>150 mm</td>
<td>150 mm</td>
<td>400 mm</td>
<td>400 mm</td>
</tr>
<tr>
<td>Max. workpiece swing diameter</td>
<td>600 mm</td>
<td>600 mm</td>
<td>700 mm</td>
<td>760 mm</td>
</tr>
<tr>
<td>Max. workpiece length incl. clamping system</td>
<td>800 mm</td>
<td>1300 mm</td>
<td>500 mm</td>
<td>500 mm</td>
</tr>
<tr>
<td>Max. workpiece weight incl. clamping system</td>
<td>500/500 kg/Nm</td>
<td>500/500 kg/Nm</td>
<td>500/500 kg/Nm</td>
<td>500/500 kg/Nm</td>
</tr>
<tr>
<td>B0-axis swivelling angle</td>
<td>+20°/-10°</td>
<td>+20°/-10°</td>
<td>+25°/-25°</td>
<td>+25°/-25°</td>
</tr>
<tr>
<td>X and Z axis stroke</td>
<td>450/550 mm</td>
<td>450/550 mm</td>
<td>700/700 mm</td>
<td>420/700 U700 mm</td>
</tr>
</tbody>
</table>

### Core Technology

#### Natural granite machine bed
- Machine bed made of natural granite, the optimal material for achieving the highest accuracy and the best surface quality.
- Natural granite offers considerable advantages over cast iron or polymer composites in terms of precision for many grinding applications.

#### Linear motors
- Linear motors ensure highly dynamic transmission of power. This means, for example, that precise results can be obtained in non-round grinding.
- Fast, precise movements assure the highest productivity and quality.
- No wear parts, maintenance-free.
- High precision through active cooling.

#### Workheads
- Danobat-Overbeck design, built in house components for highest precision and a long life.
- Modular designs for best application.
- Selected materials and designs for stable temperature performance.
- Easy integration of clamping cylinders.

#### Grinding spindles
- Top quality spindles.
- High-precision bearings with oil-air lubrication or constant lifetime grease lubrication.
- Selected materials for stable temperature performance, driven by a built-in motor.
- Cutting speeds automatically controlled with frequency drives.
- Independent temperature control and efficient liquid-cooling system.