Doimak RFM 500 SL: HOB grinding machines for medium-small modules.
Doimak RFM 1000 G: Multi-spindle HOB grinding machines for small & high modules.
Miscellaneous

- Software for *.dxf profile importing.
- Standard parametric profile programming.
- High dynamic wheelhead axis by means of linear motor configuration for high precision relief grinding.
  - Built-in motors in the workhead.
  - Different wheelhead configuration for specific application depending on the module: cylindrical wheel, cup-form wheel or finger wheel.
- Optical high precision linear scales.
- HF electrospindle for the dressing unit -diamond disc CNC interpolation.
- Helix angle by means of direct torque motor (+90° / -225°)
- Probing sensor for part pre-setting and basic geometrical verification: pitch, diameter, cylindricity

Dimensions

- Distance between centers  600 / 1200 mm
- RFM 500 SL max module = 10
- RFM 1000 G max module = 30
- Accuracy class: AA to AAA according to DIN 3968

Customized grinding technology

Doimak Hob grinding machines are user customized machines depending on the profile grinding technology required by the customer.

Depending on the hob dimensions, focused mainly in the min/max module required, the wheelhead configuration will be adapted and machine subgroups -workhead, tailstock, etc- will be dimensioned accordingly.

The linear motor on the wheelhead slide gives the machine a superb dynamic response during teeth relief grinding.

Contact us
MULTIPLE WHEEL HEAD CONFIGURATIONS

Conf. 1: Cylindrical hob grinding
- The spindle is based on a belt/pulley configuration.
- This wheel-head configuration developed for grinding modules 0.4<\(M\)<10 and profile shaped at both sides of the wheel.
- The wheel profiling can be either parametric or DXF profile imported.

Conf. 2: Cup wheel grinding (*)
- Based on direct servomotor or belt/pulley configuration.
- Used for medium sized modules and higher reliefs 8 \(\leq M < 15\)
- A specific manual horizontal rotating angle -A axis- gives the possibility for higher reliefs.

Conf. 3: Finger wheel grinding (*)
- Based on high frequency electrospindle, from 30,000 to 60,000 rpm and 5 to 10 kW.
- Used for highest modules.
Technical data

**Main dimensions:**

<table>
<thead>
<tr>
<th></th>
<th>RFM 500 SL / RFM 1000 G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length between centers</td>
<td>600 mm / 1,200 mm</td>
</tr>
<tr>
<td>Height of centers</td>
<td>150 mm / 270 mm</td>
</tr>
<tr>
<td>Swivelling axis</td>
<td>+90° - 225°</td>
</tr>
<tr>
<td>Hob modules</td>
<td>0.4-10 / 0.4-30</td>
</tr>
<tr>
<td>Part max. weight</td>
<td>100 Kg / 500 Kg</td>
</tr>
<tr>
<td>Installed power</td>
<td>35 kW / 65 kW</td>
</tr>
<tr>
<td>Machine Total weight</td>
<td>8,000 kg / 12,000 Kg</td>
</tr>
</tbody>
</table>

**Transversal slide X:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Maximum travel</td>
<td>275 mm-380 mm</td>
</tr>
<tr>
<td>Maximum travel speed</td>
<td>10,000 mm/min – 8,000 mm/min</td>
</tr>
<tr>
<td>Linear scale resolution</td>
<td>0.0001 mm</td>
</tr>
</tbody>
</table>