

# User Manual RAPID mini precision grinder

### **Applications:**

Cylindrical grinding – taper grinding – form grinding – polygon grinding – plunge-cut grinding – smallest diameter grinding

### On your surface grinding machines!



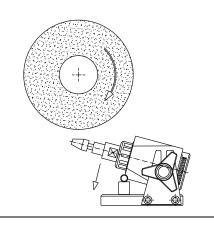


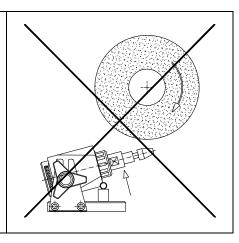
### Mode of use

- 1. Set the RAPID mini on the magnetic table of the surface grinder. Adjust the right-angled groundplate to the stop ledge of the magnetic table and switch the magnet on.
- 2. Place the workpiece under the centre of the grinding wheel.
- 3. Select with ⟨⇒⟩ or (⇒) the sense of rotation and spindle start.
- 4. Determine the highest point of the workpiece by moving the machine-table.
- When grinding cylindrical and taper parts, the timing belt must be *tightened* and the index bolt must be *unlocked!* Switch the motor on and let the workpiece rotate.
- 6. When grinding surfaces or polygons, the timing belt must be loosened. For this, the clamping screw for the motor bracket must be released. This screw is on the bottom of the block. Then you can move the motor along the slot.
- 7. The motor must be **switched off** and the index bolt **must be locked**.

# Observe safety instructions:

- In slewed position only grind *Towards* the gauge block!
- NEVER REMOVE THE TIMING BELT COVER WHEN MACHINE IS IN OPERATION





#### Maintenance:

- The RAPID mini grinder is sealed on the front and rear side with a shaft-sealing ring for splash-water protection.
  - In case of heavy coolant use we recommend an additional cover.
- Cleanness and good care preserve the precision of the RAPID mini grinder.

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### **Taper grinding:**

- Slewable up to 45° (relative 90°). Use gauge block according attached sine table.
- Up to +45° angle position place the gauge block underneath the front sine axle.
- When minus degrees are necessary, position the gauge block underneath the rear sine axle.
- At an angle +90°, adjust both sine axles vertically.

## Grinding with tailstock and rigid center punch:

- Please observe heat development, thin workpieces may bend.
- Motor-temperatures up to ca. 60° are harmless.

### Workpiece change:

- Lock the spindle with the index bolt. Loosen, respectively tighten the collet chuck with the hook spanner.
- The spindle cone (toolholder) is suitable for collets Ø-range 2-20mm.
  High precision collets, reduction sleeve ER11, reduction sleeve DECKEL S20, three-jaw chuck Ø80mm, magnet chuck Ø60 and Ø100mm are optional.

### Please compare set voltage on the main switch with your line voltage.



- 1. Connect mains supply and 5-pole lead. The device is on.
- 2. The OFF button is illuminated.
- 3. Select the sense of rotation. **Right** with □ , **left** with □
- 4. The active rotation button is illuminated
- 5. With the potentiometer is the spindle speed adjustable up to ca. 300min<sup>-1</sup>
- 6. Stop the spindle rotation with OFF

#### Technical details:

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Ground plate ca.	125x100mm	Weight ca.	9 kg
Height (horizontal) ca.	110mm	Index-divider	15°
Height (vertical) ca.	175mm Centre height ca		45mm
Toolholder	E32 (for collets Ø 2-20mm)	Spindle true running	0,002mm
Drive	E-Motor, continiously adjustable up to 300min <sup>-1</sup> sense of rotation selectable	Mains supply	115-230V 50-60Hz 70W

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