KELLENBERGER

CNC Universal Cylindrical Grinding Machine

KELLENBERGER K8



Getting started: precision start into the world of Kellenberger grinding.

The K8 complements the Kellenberger program with a highly precise standardized machine with a good price/performance ratio. The design of the machine offers outstanding features like a heavy-duty one-piece cast-iron machine bed for extraordinary stability and rigidity, and ultra-precise high-rigidity V-flat Z-axis guideways, meticulously hand-scraped and specially coated for superior friction reduction and long-lasting self-lubrication.

The Kellenberger K8 can optionally be equipped with a single external grinding wheel for straight and angular punch grinding or a single internal grinding spindle for flexible operations, which allows for a great number of machining tasks.

A swiveling device with automatic indexing provides multi-process machining of complex parts in a single setup. The K8 is equipped with a State-of-the-Art FANUC 0i-TF/G CNC control with Kellenberger user interface and 10.4″ TFT color display, plus an ergonomic handheld pendant for user friendly effortless operation.

FEATURES

- High-performance precision NSK ball-screw drives on all feed axes for flawless motion control
- Programmable minimum feed in X/Z axes 0.1 µm
- High-precision grinding spindle with premium angular-contact ball bearings
- Max. wheel diameter 500 mm with 63m/s peripheral speed
- Powerful 7.5 kw belt driven motor spindle for external grinding with smooth stepless speed control
- Micro-adjustable tailstock with 0.5 µm taper adjustment accuracy
- Smart longitudinal positioning probe for fast workpiece setup

TECHNICAL SPECIFICATIONS:

Working Area

- Center height: 200 mm
- Maximum grinding diameter: Ø 380 mm
- Max. length between centers: 1,000 mm
- Maximum workpiece weight between centers: 100 kg
- Maximum workpiece weight floating live spindle: 50 kg

Wheelhead X-Axis Feed

- Precision ball screw with FANUC 0i-TF/G
- High-accuracy linear guideways
- X-axis travel: 350 mm
- Max. X-axis feed rate: 10 m/min
- Min. incremental move (HSG and CNC): 0.0001 mm

Table Z-Axis Feed

- Ball screw with FANUC 0i-TF/G
- V-flat guideways, hand-scraped
- Z-axis travel (1000 model): 1,150 mm
- Max. Z-axis feed rate: 12 m/min
- Min. incremental move (HSG and CNC): 0.0001 mm

U-Type Grinding Wheelhead

- Swiveling device with automatic indexing 1°
- Automatic retracting wheel guard
- Max. wheel size: Ø 500 × 80 × 203.2 mm
- Wheel mounting taper: 1:7.5, Ø 75 mm, belt-driven
- Belt driven motor spindle OD power: 7.5 kW
- Stepless speed control, constant-surface-speed up to 63 m/s

Workhead (WQ20)

- Universal precision spindle can be used for dead centers or chuck work; FANUC 0i-TF/G, synchronous-belt transmission, programmable constant-surface-speed, air sealing
- Speed range: 0–1,000 rpm/min (stepless)
- Roundness accuracy: < 0.0005 mm
- Spindle taper: MT 5
- Through-hole diameter: Ø 38 mm
- Clamping torque (with fixture): 100 Nm
- Motor power: 1.8 kW

Tailstock (TQ20) with manual Fine-Adjust

- Manual tailstock with taper fine-adjustment; sliding bearings, cooled by machine coolant
- Quill diameter: Ø 50 mm
- Quill travel: 50 mm
- Internal taper: MT 4
- Fine-adjustment accuracy: 0.0005 mm
- Adjustment range: ± 0.1 mm

Electrical (EU/USA/APAC)

- Standard power: 380/400 V, 3 PH, 50 Hz (E-exchange)
- Control voltage: 220 V AC / 24 V DC
- Voltage tolerance: ± 5 %
- Full-load power consumption (main unit): 32 kVA

Machine Size & Weight

- Footprint (1,000 model): 3,660 × 2,288 mm
- Height: 1,821 mm
- Weight (1000 model): 7,500 kg

Pneumatics

- Inlet pressure: 5.5 bar
- Air flow: 40–50 L/min

Lubrication

- Automatic central lubrication station at rear of machine for guides and screws
- Reservoir capacity: 16 L
- Output pressure: 1–1.4 bar

Technical specifications subject to change

©2026 Kellenberger Switzerland AG