K43C technical data

Workpiece spindle head

Spindle mount	Ø100mm (optional: Ø80;Ø60;Ø55)
Workpiece spindle (standard/other interfaces possible)	100 x 160 ISO 40
Rotation speed	continuous 200 - 1800 min-1
Rotation direction	synchronous/counter rotation
Grinding wheel Ø workpiece	0 - 350 mm

Coordinate table

X-axis travel distance + rough adjustment	150 mm + 80 mm
Y-axis travel distance + rough adjustment	130 mm + 45 mm

Dressing head

Dressing wheel	Ø max. 200 mm
Dressing wheel	max. 20 mm width
Rotation speed	continuous 1000 – 3200 min-1
Mounting hole (standard/option)	32 mm / 31,75 mm (5/4")
Swivel range (left/right)	±96°
Oscillating stroke	40 mm
Infeed / rate	manual /
	automatic only when combined with access protection
Additional swivel	both sides ± 27°

Camera Monitorsystem

Monitor	19" Industry TFT
Camera Zoombereich	motor-driven: 9, 20, 40, 55 and 100 times
Schnittstellen	USB, LAN
Zeichnungsformate	DXF, VBF

Dimensions (L x W x H)	Weight:
1800 x 2600 x 2200 mm	approx. 1000 kg

(height 2800 mm with optional cover)

Grinding wheel shapes





Gutachstrasse 17 info@kirner-schleifmaschinen.de www.kirner-schleifmaschinen.de **Kirner Maschinen GmbH**

+49 76 51 92 26-0



K43C Dressing Machine

Process security Flexibility Precision

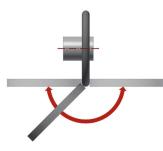
The K43C Dressing Machine

The K43C dressing machine is a compact unit for dressing and profiling diamond and CBN grinding wheels of various shapes and specifications, in diameters ranging from 0 to 350 mm.

Advantages of the K43C:

- High machine stability
- Able to process single wheels or wheel sets with its additional dressing head swivel option
- Maximum accuracy in reproducing wheel profiles and concentricity
- Able to profile extremely small radii (e.g., inner radii up to 0.25 mm and outer radii up to 0.05 mm)
- Intuitive operation, minimal wear and maintenance
- Quick and easy setup through variable teaching options for oscillating stroke positions using a hand-held control unit
- High-resolution camera and monitor system
- Multi-stage zoom range from factor 9 to over 100x using a motorized zoom lens
- KirCam visualization software, specially developed for dressing processes
- Robust, sealed industrial PC with Windows operating system and LAN/USB interface
- Highly effective extraction, directly under the machining point and at the dressing wheel guard
- By combining the various options, we can optimally adjust the machine to suit your task, for example a distance measuring system for the X/Y axis, a hand wheel for the oscillating axis, access protection with automatic infeed...











Grinding wheels are needed to produce high-quality precision tools in both large and small quantities, and they need to meet the toughest requirements in terms of geometry and tool service life. Only with a precisely defined grinding wheel profile, tools can be produced on a larger scale with consistent quality. At the same time, prices need to remain competitive despite the high quality.

The KirCam visualization software, specially developed by Kirner, combines with a high-resolution camera and monitor system to enable multi-level zoom ranges from factor 9 to over 100x. That allows even the smallest specifications to be profiled and visualized. The program contains DXF templates for standard grinding wheel shapes that can be configured directly on the machine.





Display standard shapes easily in the software

The machine kinematics allow optimal adjustments to be made for a wide range of dimensions and specifications by adapting the relative speed and oscillating regrinding using an SiC wheel in synchronous/counter rotation. The grinding wheel can thus be shaped and sharpened all in one process.

