

KHB 300

Fully automatic sharpening machine for complete machining of the hook and side angles of carbide-tipped circular saw blades [with integrated measuring system and preparation for robotization]

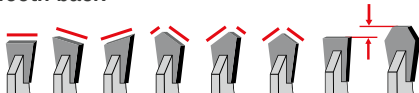


Highlights

- ✓ The space-saving machine concept enables for high ergonomics and excellent operability. Easy access for maintenance work on the control cabinet, coolant pump, pneumatic and extinguishing device.
- ✓ Optimal, fast and safe programming and setting of the circular saw parameters.
- ✓ "LINUX Debian 10" control with multi-core processor
- ✓ Grinding of all tooth geometries, incl. bevel and chamfering, in only one setting
- ✓ Repair tooth detection by means of measuring probe
- ✓ Measuring protocol for cutting angle, clearance angle, bevel grinding tooth back and supernatants
- ✓ After the grinding process, the concentricity is measured on the circumference and protocolled
- ✓ Preparation for the integration of a fully automatic loading system (robot)

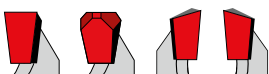
Application programmes

Tooth back



- Straight grinding
- Bevel grinding up to 45° / Chamfering
- Tooth height difference / triple-chip
- Group toothing up to 8 teeth

Tooth face



- Straight grinding
- Bevel grinding up to 30°

Measuring

- Width of saw blade body and cutting kerf
- Side clearance back and front
- Centricity offset
- Height difference
- Saw blade diameter
- Group toothing up to 8 teeth
- Tooth top clearance (overlap)
- Tooth top clearance angle
- Tooth top angle (alternating bevel teeth)

Functions

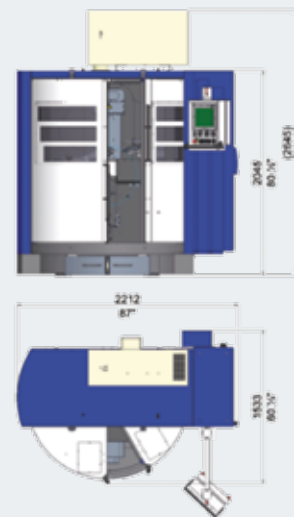
- Automatic measurement
- Automatic diameter detection
- Automatic probing / tracing
- Automatic saw blade positioning

The standard integrated measuring probe records all relevant parameters such as cutting width, blade thickness and rake angle.

The zero point can be determined automatically by probing the grinding wheel on the saw tooth.

The KHB 300 is prepared for automation with ABB industrial robots.

Technical Data



GENERAL INFORMATION:

Tooth geometry	programmable
Tooth pitch	8 – 120 mm
Tooth height	up to 40 mm
Blade thickness	up to 8 mm
Tooth back chamfering / bevel grinding	0 – 45°
Tooth face rake angle	-25° up to +30°

CIRCULAR SAW BLADES:

Circular saw outer Ø	180 – 860 mm
Circular saw bore Ø	22 – 200 mm

GRINDING WHEELS:

Grinding wheel outer Ø	200 – 250 mm
Grinding wheel bore Ø	32 mm

PROPERTIES:

Electrical connection	400V 3Ph 50Hz, 6 kVA
Compressed air requirements:	6 bar