

TECHNICAL DATA

CNC – Precision Surface and Profile Grinding Machine

manufacturer	ELB
type	Smart BD 10 Comfort
control	B&R Comfort
built	2009



Grinding range

Grinding length	1.000 mm
Grinding width	600 mm
Grinding height (from working table on)	600 mm
Table load (on magnetic plate)	1.000 kg

Magnetic table

Clamping area	1.000 x 600 mm
Height (ca.)	80 mm
Construction	vertical pole pitches
Pole pitch	18 mm
Weight ca.	361 kg

Air core drilling with sinter metal use 2-rowed arranged in standard construction

X-Axis - longitudinal table movement

Work piece table		meehanite-cast iron
Guiding system		Prism flat guidance
Slideways		Plastic-coated
Table clamping size	1.360 x 590	mm
Table longitudinal stroke	max. 1.100	mm
Power X-movement		Hydraulic
Grinding way adjustment		Manual by sliding parts

Z-Axis – cross movement grinding disk

Cross slide		Meehanite-cast iron
Guiding system		Prism flat guidance
Slideways		Plastic-coated
Automatical cross path	max. 560	mm
Power Z-movement		Ball srew
Displacement		Incremental, encorder
Resolution	0,001	mm
Rapid	max. 2.000	mm/min.

Y-Axis – vertical movement grinding disk

Grinding column		Meehanite-cast iron
Slideways		Linear guidance
Power Y-Movement		Ball screw
Displacement		Incremental, encorder
Resolution	0,001	mm
Rapid	max. 1.500	mm/min.

Electrical straight dresser

Positioninig	Mounted above the headstock	
Dressing width	1-105	mm
Diamond vertical adjustment max.	80	mm
Diamand taper		MK 0
Dresser diamond	0,75	Karat
Incl. automatic compensation		
Dresser feed rate stepless adjustable		
Diamond feed optionally per single or- double stroke		

Grinding spindle head

Motor – version	DS-Flanged motor
Power	10 kW
Grinding spindle speed	1.000 – 3.000 Min-1 Three-phase current
Spindle bearing	axial and radial back-lash free
Grinding spindle size	400 x 100 x 127 mm

Roller beared grinding spindle in block construction with preloaded high precision spindle bearings and live time grease lubrication, spindle axial und radial backlash-free preloaded

ELB grinding programme “Comfort”

- Grinding function surface grinding
- Grinding function infeed grinding
- Grinding function ECO-grinding (combined plunge and surface grinding)
- Grinding function each with stored automatical grinding cycle
- Easy handling for manual and automatical grinding
- Digital positioning display
- Display of currenty settings
- Automatical dressing incl. dressing compensation
- Graphic-supported input and teach-in function

Dimensions, Weight

Length x Width x Height	3,6 x 2,5 x 2,4 m
Weight ca.	6.300 kg

Equipment

- Electro-Permanent-Magnet clamping plate 1.000x600mm
- Wet grinding device with coolant tank, tank capacity 360l, coolant pump, power 52l/min., splash water protection, coolant nozzle with mounting
- Universal -paper filter unit, filter paper width 710mm, cleaning power 80l/min.
- Electronic straight dresser
- Magnetic plate supply facility with adhesion force regulation (30 – 100%)
- Internal flushing incl. spray gun
- Machine light