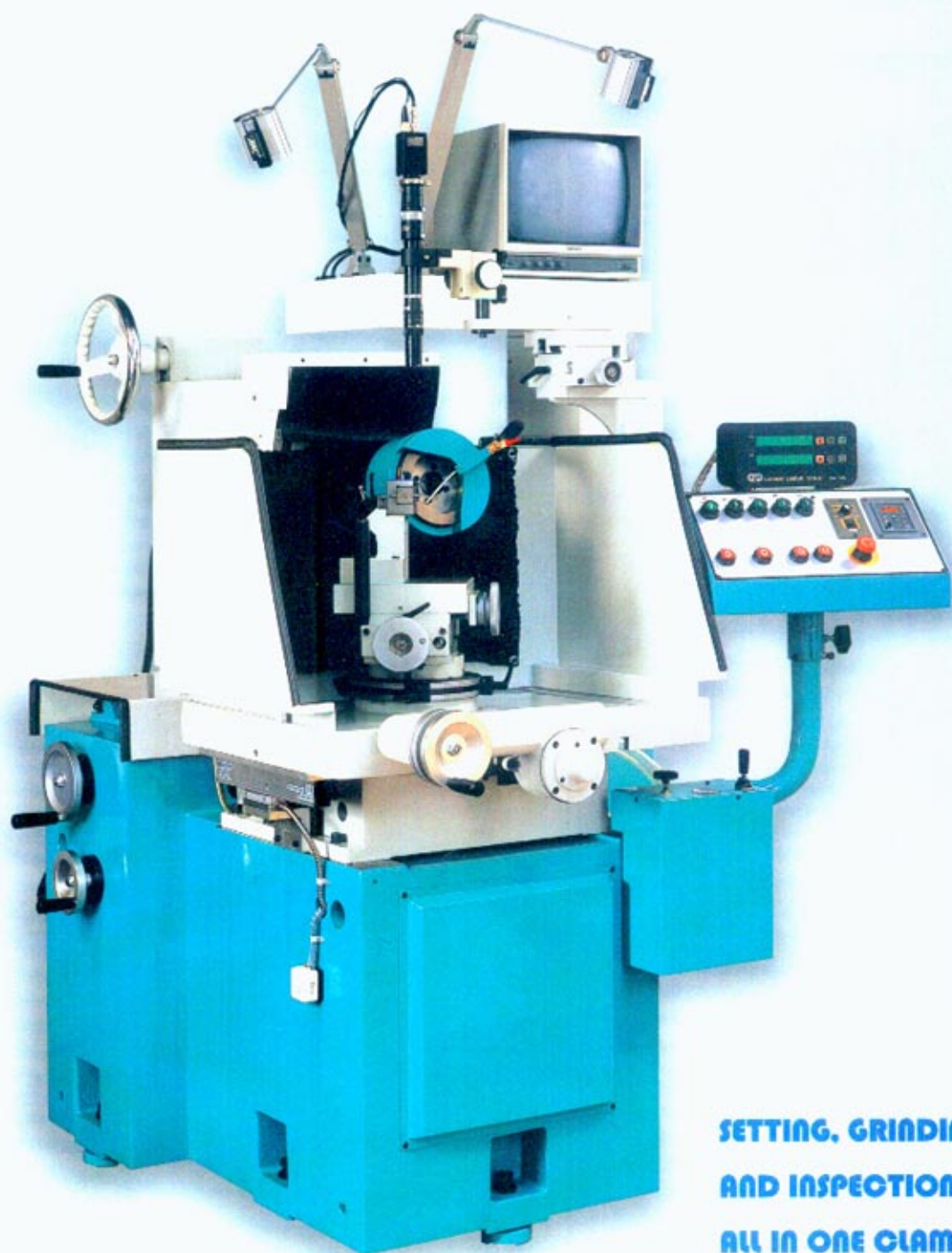


MODEL TB-200N

PCD & PCBN TOOL GRINDING MACHINE

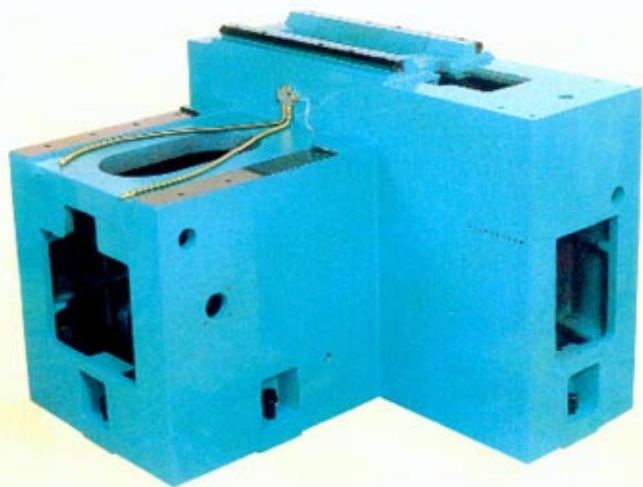


**SETTING, GRINDING
AND INSPECTION
ALL IN ONE CLAMPING**

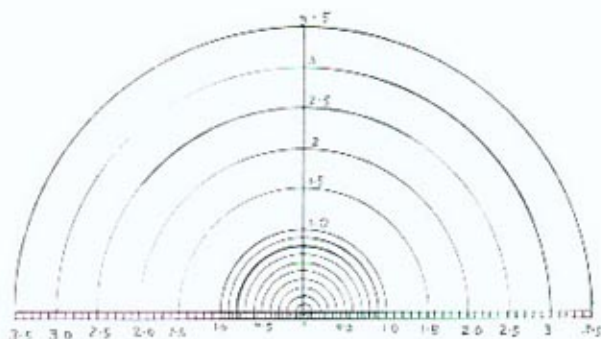
MODEL TB-200N

DESIGN FEATURES:

- * One-piece cast iron base provide extra rigidity and minimize Vibration.
- * The cross slide and longitudinal slide is mounted with SCHNEEBERGER type N and O heavy duty & precision linear slide guide for its accuracy and life.



- * Heavy duty swivel table pivots on 4 pieces precision angular contact bearing.
- * The oscillation is adjustable in position, stroke and frequency.
- * C.C.D camera with T.V monitor and precision scale for easy set up & inspection during grinding.
- * Monitor scope with zoom system for adjustable from 15-120 magnification even 0.02 radius can be grinding and Inspection.

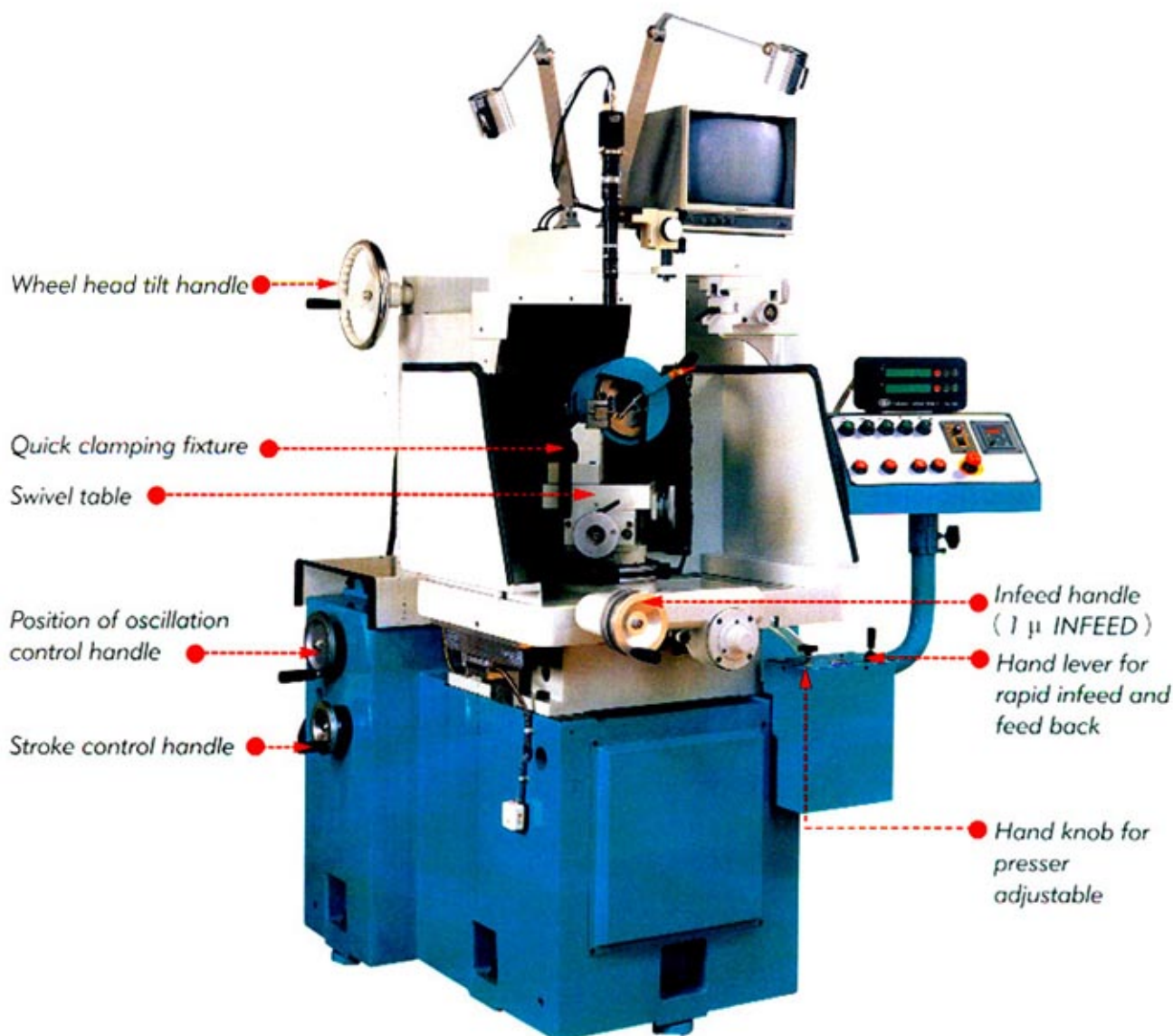


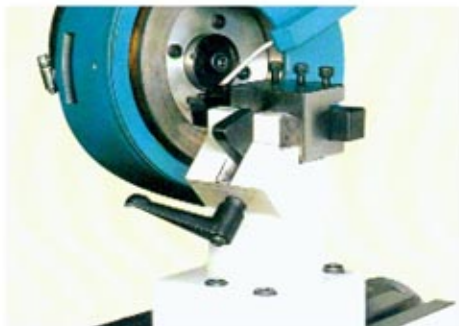
■ PRECISION SCALE

* Grinding the primary cutting edge. Tip radius and secondary cutting edge without set up changes.

THE TB-200N IS A PRECISION TOOL GRINDING MACHINE WHICH IN-CORPORATES THE NECESSARY FEATURES REQUIRED FOR THE ECONOMICAL MANUFACTURE AND REGRINDING OF A WIDE RANGE OF CUTTING TOOLS MADE OF PCD, PCBN, TUNGSTEN CARBIDE, HSS.

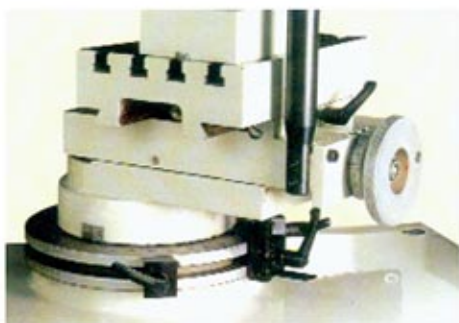
BEST POSSIBLE RESULTS FOR FINISH GRINDING AS WELL AS WITH HIGH MATERIAL REMOVAL RATES.





QUICK CLAMPING FIXTURE (STAND ACCESSORIES)

- Quick clamping fixture for rapid clamping of tool stand, The quick clamping fixture has an adjustable stop and is directly mounted to the cross table



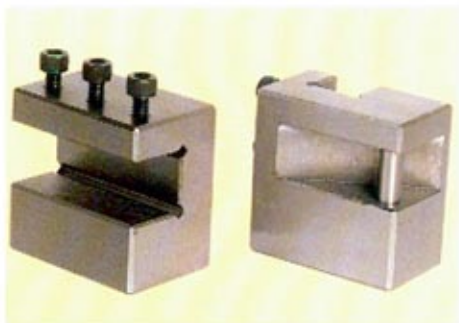
- Swivel table angle lock is by a adjustable handle lever



- Worktable rapid infeed and feed back is device by air cylinder control with a small handle lever.
- The grinding presser is different for vitrified bonded grinding wheel, metal bonded, resinoid bonded.
- The grinding presser is adjusting from 0~450 NETWON by a knob

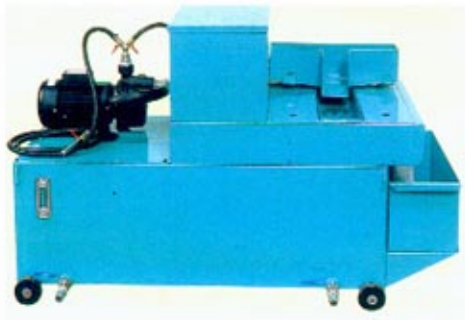


- The tiltable grinding wheel spindle is adjusting by a hand wheel, grinding wheel angle set up only a few seconds

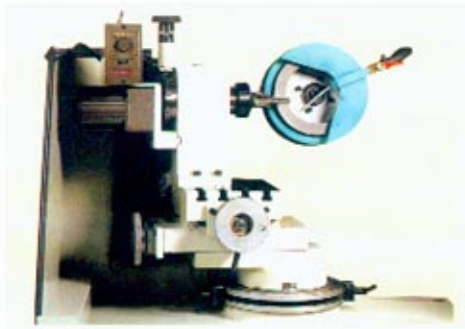


TOOL STAND

- The tool stand is stand accessories, is for clamping tip holder, delivered with 4 pieces, size 13.20.26.32mm



Large capacity coolant tank with filter for precision grinding



ROUND BAR GRINDING ATTACHMENT

· For workpieces chucking with diameter $\varnothing 3 \sim 26$ mm including rotation motor 1 set ER collet (23 pieces), dividing workhead and dividing plate (24 division), other division on request, (0~60 Rpm. Clockwise & anti clockwise rotation) end mill, form tools, cutter, drill, etc can be grinding with this attachment



GRINDING WHEEL SPINDLE WITH VARIABLE SPEEDS

· During the wheel dressing, and in order to get the optimum stock removal rate, the spindle driver with variable speed permits to adjust the best cutting speed for the corresponding materials and the various grinding wheel diameters. The inverter is built into the machine base, direction of rotation and speed can be adjusted on the control panel



Splash protection shield with magnetic stand



WHEEL DRESSER

· For dressing diamond & CBN grinding wheels, the wheel dresser is mounted to the quick clamping fixture, and is equipped with a mechanical brake.



STANDARD ACCESSORIES:

- 2 Machine light (12V)
- Coolant system included 30 liter tank without filter
- Quick clamping fixture
- Tool stand (4 pcs)
- Optical linear scale with digital display counter(0.001mm increment)
- 2/3" TV camera with 12" TV monitor, Monitor scope with zoom system
- For adjustable form 15-120 magnification
- Splash protection shield with magnetic stand



OPTIONS:

- High performace swivelling angle reader(0.05° increment)
- Grinding wheel spindle with variable speed (1000~4000 RPM)
- Large capacity coolant tank with paper roll filter(first filter) and filter cartridge 5 µm (second filter) , 200 liters tank, 2 hoses (one for coolant, one for cleaning)
- Round bar grinding attachment
- Wheel dresser



MACHINE SPECIFICATION:

- Tip radius: Ø 0-60mm
- Spindle speed:2850RPM (50HZ)
- Grinding wheel size: 150x40x40mm
- Grinding pressure regulator (0~450 NETWON)
- Grinding wheel oscillation frequency: 0~40/min (infinitely variable)
- Grinding wheel oscillation storke: 0~35mm (infinitely variable)
- Grinding wheel oscillation position: 0~200mm (infinitely variable)
- Grinding wheel inclination: -3°~+25°
- Swivel table swivelling angle: 240°
- Swivel table clamping surface: 210X160mmX4 SLOT
- Worktable handwheel division: 0.001mm/1 Division
- Grinding wheel motor power: 2.2KW
- Dimension: 1340X1300X1900mm
- Net weight: 1520KGS



www.hassas.com

Hassas Mühendislik Ltd.Şti.

Çelik Cad.No.30 4.Levent 34418 İstanbul - TURKEY

Tel: +90 212 280 5555 Fax: +90 212 282 6234