Advanced grinding, all-in one setup...

PNK-AC-CNC
CNC - HSS CIRCULAR SAWS GRINDING MACHINE
Automatic Chamfering

The flexible, hi-tech solution
High technology to lead the ever-changing world of tool processing.
PNK-AC-CNC provides full automatic process for the HSS circular saw blades of complete tooth removing, re-toothing, re-grinding and chamfering in only 1-single pass. PNK-AC-CNC is an ideal machine for the complete machining of metal circular saws. It guarantees optimum grinding quality with its state-of-the-art technology. All the data related to the circular saw is entered from the control panel. Fast and precise adjustment by it’s manual pulse handler.

A versatile response to meet all demands...

**General Features**

- 4-Axes Servo motor controlled.
- Laser probing system for automatic saw diameter measuring and teeth number calculation.
- Language selection on the control panel.
- PC controlled.
- Windows® operating system.
- Maximum Ø810mm circular saw outside diameter.
- Tooth form selection from the control panel.
- Grinding all common tooth types in one cycle.
- Automatic chamfering.
- Blade thickness input from the control panel.
- Automatic calculation of the tooth pitch.
- Absolute tooth pitch accuracy.
- Downloading a program through internet connection if demanded.
- Central lubrication.
- 17” LCD screen control panel.
- Variable grinding and grinding wheel rotation speed.
- Grinding wheel head riding on linear rails.
- Grinding and production by CBN, tooth removing by vitrified wheel.
- Smooth chamfer grinding even in saw blades with worn right-left chamfers.
- Integrated air suction system.
- Pure Oil Coolant System.
- Totally enclosed cabin for operator safety.
- Simple controls for ease of use.
- Rigid machine base.
- Ergonomic cabin for ease of loading / unloading.
- Production conformed with CE standards.
At ABM, we develop our machines, our own electronic systems and application software and manufacture all main mechanical components. Finally, we assemble and test the final product to global machine standarts. Whichever ABM machine you choose for your grinding, you will know that it is built to meet all market demands.

**Tooth Forms**

![Tooth Forms Diagram]

*Br/Bs forms are optional.

The true innovation is the product of experience and dynamics...

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**Technical Specifications**

- HSS Circular saw outside diameter: Ø80-810mm
- Automatic Chamfering: Ø220-810mm
- Blade Thickness: Maximum 8mm
- CBN Grinding Wheel: Ø200mm x 32mm
- Vitrified Grinding Wheel: Ø150/Ø200mm x 20mm
- Grinding Wheel Motor Power: 3 kW
- Coolant Type: Ready for Pure Oil Coolant
- Coolant Pressure: 10 Bars
- Motor Quantity: 7 pieces
- Tooth Forms: A, AV, AW, B, BW, C, Hz, O (Optional Br, Bs)
- Operating Voltage: 380V, 3Ph, 50-60Hz
- Total Power: ~8,50kW
- Saw holders provided with the machine: Ø20-22-25-30-32-35-40-45-50-55mm
- Net/Gross Weight: 1100/1125kg
- Dimensions: 2100*2000*2100mm

1- Free Programming (Various Parameters)
2- Programming by DIN Norms
*Unique Toolpath animation software
**Axes of Machine**

1. 17" LCD Control Panel
2. Integrated mechanical air filtration unit
3. Capacity 100lt coolant container with level indicator
4. 4-axes manual control by manual pulse handler

**Grinding Wheels**

- **Vitrified grinding wheel**
- **CBN grinding wheel**

**Design of 4-Axes**

Optional 5th-axis for chip-breakers

**FEPA Type 1A1**
- \( D \) Ø150/Ø200mm
- \( H \) Ø20mm
- \( U \) 3 to 10mm

**FEPA Type 14F1**
- \( D \) Ø200mm
- \( H \) Ø32mm
- \( R \) 0.8mm

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**High Accuracy / High Productivity**

**OPTIONALS**

- *Chip breaker optional attachment*
  - Grinding the chip breaker slots of HSS circular saws.
  - Grinding right-lefts slots in one cycle.

- *Optional Magnetic Separator System*
  (Automatic diameter and number of teeth calculation)

- *Optional Laser Measuring System*

- *Optional plunge grinding software for notches/cold saw blades (operation with profiled wheels)*

- *Optional software for circular knives grinding*

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**Operating screens [Br/ Bs forms with Right-Left Slots at one cycle]**

- General operating screen
- Chip-breaker software production
- Chip-breaker parameter input screen

* Br/ Bs Forms

* Optional software for variable pitch (VP) blades