

CNC 810



Advanced grinding, it's what a grinder should be...

CNC Top & Face Circular Saw Grinder with 7 fully CNC-controlled axes

Free programming feature

Automatic Positioning of B Axis

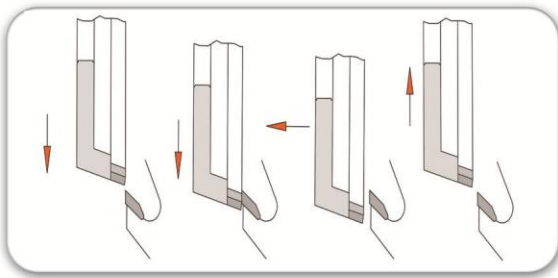
The flexible, profitable solution

High technology to lead the ever-changing world of tool processing.

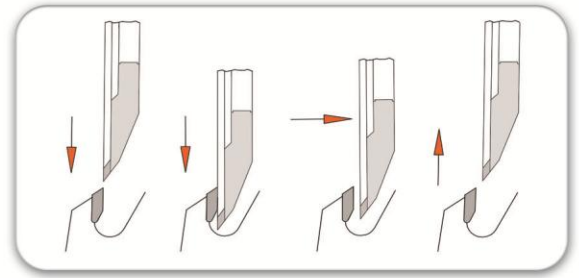
ABM offers the complete solution: Getting the most out of the CNC.

The CNC is distinguished by its high speed as a 6-axes CNC controlled top and face grinding machine that is capable of grinding all tooth forms on wood and aluminium blades.

There are two different grinding processes in standard that can be performed with this machine:

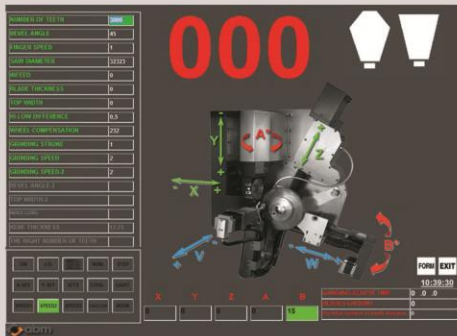


Top Grinding Operation



Face Grinding Operation

A versatile response to meet all demands...



Operator-friendly ABM interface for ease of use. Positioning displays of all 7-axes.

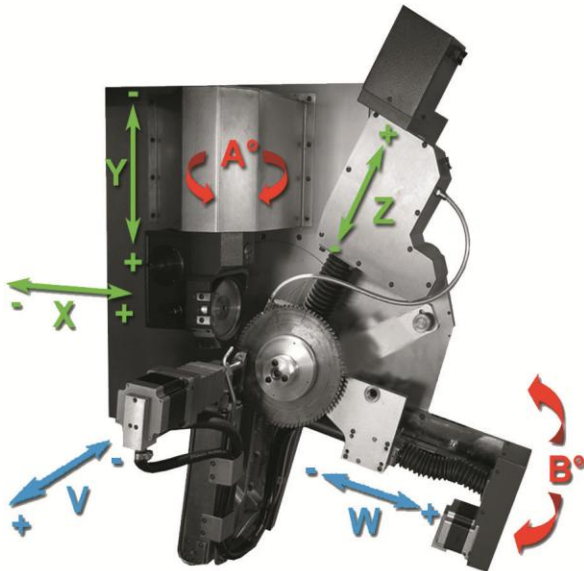


Unique software for Newly-Replaced Teeth. Production software for rough-fine cycles and ability to do teeth one by one or by sequenced rough and fine cycles.

Features

- 7-axes fully CNC-control.
- Special plating on mechanical components ensure non-corroding and hardening.
- Automatic Broken teeth skip and Variable pitch indexing by intelligent finger.
- Unique software for Newly Replaced Teeth and Saw Blade Production.
- LCD display and operating interface in any stated language.
- Ready tooth form programs, unlimited memory for saving, FREE programming.
- Grinding of all tooth types in one cycle for wood and metal industries.
- New program set-up while the machine is in progress.
- Independent grinding speed selection for grinding flats, rights and lefts.
- Maximum outside diameter Ø810mm.
- Clamping by Microstep motor ensures automatic clamping distance control, clamping torque control and blade thickness control to self center bevels.
- Individual Top Flat Width and Height difference adjustment in Triple Chip Form.
- Central lubrication system reducing maintenance and increasing machine life.
- Windows® based PC control enables update over internet or by flash drive.
- Totally enclosed cabin, separate electrical cabin and machine cabin.
- Ready for oil coolant
- Operator-friendly machine program interface for ease of use.
- Robust base constructed in ergonomic cabin.

Become independent ! Optimum use of the fastest grinding machine and the most operator-friendly control system. Special high speed set-ups can give "off-carbide" grinding time which increases productivity without depending on grinding accuracy or wheel life. All the axes can be adjusted independantly on rapid speed and machining speed, even the machine is in function.



- (X) Infeed Axis
- (Y) Grinding Axis
- (Z) Indexing Axis
- (A) Bevelling Axis
- (B) Back clearance&Hook Angle Axis (Auto Position)
- (V) Clamping Axis
- (W) Saw Blade Positioning Axis

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



Torque, distance and automatic blade thickness control by microstep clamping













Automatic Broken teeth skip and Variable pitch indexing by intelligent finger. Optional pneumatic system for split (double-part) scoring blade grinding















Technical Specifications

- Circular saw outside diameter Ø80-810mm
- Bore diameter from Ø12mm
- Blade thickness Maximum 6mm
- Tooth pitch Maximum 100mm
- Grinding angle (-10°) - (+30°)
- Bevel angle ±45°
- Grinding wheel outside diameter Ø125mm
- Grinding wheel bore diameter Ø32mm
- Coolant motor capacity ~50 lt/min
- Coolant container capacity ~110 lt
- Microstep rapid speed 50mm/s
- Servo rapid speed 150mm/s
- Connected load ~3,5kW
- Net/gross weight 985/1050kg
- Dimensions 125*185*215cm

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 standards. Whichever ABM machine you choose for your grinding, you will know that it is built to meet the all market demands.

Top and Face Tooth forms completed in one cycle

FREE	ALL	Free Programming
Pointed Top		Flat-Pointed Top
		Pointed Top (All teeth pointed top)
5T (Combo)		5T-1 (Flat-Right-Left-Right-Left)
		5T-2 (Flat-Left-Right-Left-Right)
		5T-3 (Flat-Right-Left-Right-Left-Flat-Left-Right-Left-Right)
		5T-4 (Flat - Right-Left-Right-Left) [For saw blades with irregular tooth pitch]
		5T-5 (Flat - Left-Right-Left-Right) [For saw blades with irregular tooth pitch]
D-RIG		Flat-Right-Right-Right
D-LEF		Flat-Left-Left-Left
TRP-2F		Triple Chip-Flat-Flat

Flat		All teeth flat
		Flat-Flat (Hi-low)
ATB		ATB (Right-Left)
		Right-Left-Left-Left
		Left-Right-Right-Right
		All right bevels
		All left bevels
Triple Chip		Triple chip - Flat
		Triple-triple chip (Hi-low)
		Triple chip (all teeth triple chip)
		TRP-R (Triple chip with right-left corner break)
		TRP-L (Triple chip with left-right corner break)
SS45		Raker Left-Right
		

The ABM CNC-Motion Control difference: productive and always a head...

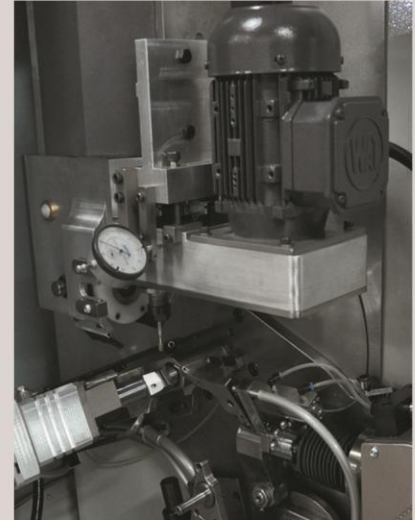
Optionals:



Optional Oil Filter



Optional chip-breaker attachment



Optional hollow-face attachment