PREMIUM-LOAD

abm
Grinding Technologies

Advanced grinding, to meet your demands.

PREMIUM-LOAD

8 AXES GRINDING MACHINE WITH LOADING SYSTEM

The flexible, hi-tech solution

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

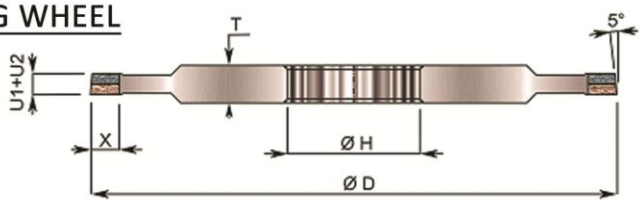
PREMIUM-LOAD

PREMIUM-LOAD is designed for response of high necessities for circular saws production and grinding services. Our new generation machines minimize human labor; which robot loading system and in compact central body, face and top grinding machine are together. With high efficiency, loss of time in your workshop is prevented. Free programming for cold saw blades also enables the machine to make production for metal blades. The machine has a wide production capability of wood and metal blades.
PREMIUM-LOAD, for all teeth form of carbide circular saws in only one pass, ensure a perfect and top quality level grinding. Integral measuring probe enables high precision operation.

Top Grinding

TOP GRINDING WHEEL

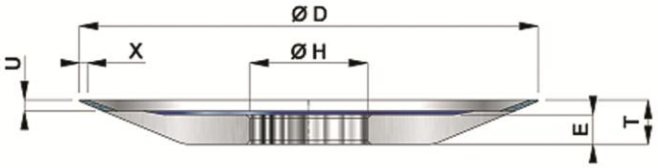
Type 14AA1
D Ø150mm
H Ø32mm



Face Grinding

FACE GRINDING WHEEL

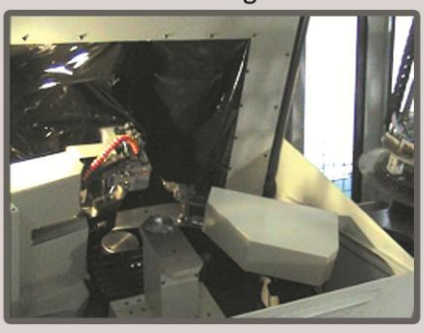
Type 12V2
D Ø160mm
H Ø32mm



A versatile response to meet all demands...

15” Touch Panel Feature

Loading



Unloading

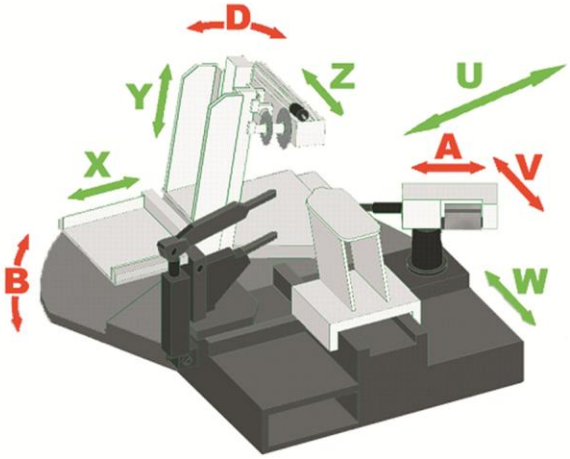
General Features

- 3 carriages for loading and unloading.
- Complete top and face grinding in one cycle.
- 8 axes Servo motor CNC controlled.
- Loading and Unloading by 4 magnetic grippers.
- Repairing the newly-replaced teeth.
- Application of two grinding wheels.
- Optional Hollow Tooth Grinding Attachment
- Optional D axis driven by servo motor for face beveled blades.
- Optional Chip Breaker Attachment.
- Manual D axis for manually adjustable head bevel.
- Operating screen in any language.
- High performance periphery grinding technology.
- PC controlled.
- Windows® operating system.
- Possibility of selecting the grinding program from the control panel.
- Grinding all common tooth types in one cycle.
- Integral measuring probe.
- Automatic saw blade thickness calculation either by means of measuring probe or manually entering on the control panel.
- Automatic compensation calculation by means of the measuring probe.
- Automatic kerf thickness calculation by means of a measuring probe.
- Face and top angle data collection by means of measuring probe.
- 15” touch screen control panel.
- Max. outside diameter Ø610mm.
- Pneumatic blade clamping.
- Totally enclosed cabin for operator safety.
- Simple controls for ease of use.
- Rigid base.
- Variable grinding speed.
- Ergonomic cabin construction for ease of loading and unloading.
- Independently adjustable grinding and indexing speeds.
- Integral air suction unit.
- Oil coolant ready.
- Production conformed with CE standards.

PREMIUM-LOAD

Become independent ! Optimum use of the unique grinding machine and the most operator-friendly control system. Special high speed set-ups can give “off-carbide” grinding time which increase productivity without depending on grinding accuracy or wheel life. ABM Control system eases the grinding operations while increasing your quality.

Axes of Machine

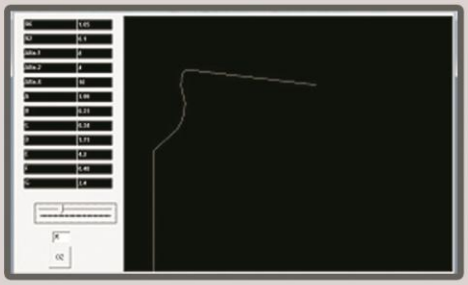


Motors on the Machine

	Power (kW)	Revolution (RPM)	Feeding Voltage	Additional Features
Axis X (Servo)	0.75	3000	-	Absolute encoder-with brake
Axis Y (Servo)	0.75	3000	-	Absolute encoder-with brake
Axis Z (Servo)	0.75	3000	-	Absolute encoder-with brake
Axis A (Servo)	0.75	3000	-	Absolute encoder-without brake
Axis B (Servo)	0.75	3000	-	Absolute encoder-with brake
Axis U (Servo)	0.75	3000	-	Absolute encoder-with brake
Axis V (Servo)	0.75	3000	-	Absolute encoder-without brake
Axis W (Servo)	0.75	3000	-	Absolute encoder-with brake
Grinding wheel motor	1.1	2900	380V-3phases	
Coolant motor	0,75	2800	380V-3phases	
Air suction motor	0,37	2800	230V-1phase, 50Hz	

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

Optional Module for Production of Cold Saw Blades (Cermet)



Optional Free Profile Programming of Cold Saw Blades

Technical Specifications

- Circular saw outside diameter — Ø150-610mm
- Post diameter — Ø30 mm (Replaceable posts)
- Loading Carriage — 3 Carriages
- Loading Capacity — 50 Saw Blades
- Air Pressure Required — Minimum 6 Bars
- Cutting angle — (-7°) - (+45°)
- Max. Tangential angle — +25°
- Grinding wheel outside diameter — Ø160mm
- Grinding wheel bore diameter — Ø32mm
- Working speed — Variable from 0,5mm to 20mm/s
- Coolant motor capacity — 55lt/min.
- Coolant tank capacity — ~120lt.
- Feeding rate — 0-25 teeth/min.
- Motor quantity — 11
- Connected load — ~6.8kW
- Voltage — 380V, 3Ph
- Net/gross weight — 4200/4300kg
- Dimensions — 710*250*240cm.

PREMIUM-LOAD

At ABM, we develop our machines, our own electronic systems and application software and manufacture all main mechanical components. finaly, we assamble 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 the all market demands.

Tooth Forms Ground in One Cycle

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)

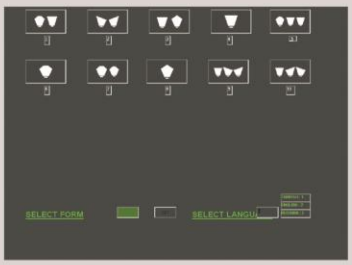
Pointed Top		Flat-Pointed Top
		Pointed Top (All teeth pointed top)
5T (Combo)		5T-1 (Flat-Right-Left-Right-Left)
		5T-2 (Flat-Left-Right-Left-Right)
		5T-3 (Flat-Right-Left-Left-Right-Flat-Right-Left-Left-Right)
		5T-4 (Flat - Right-Left-Right-Left) [For saw blades with irregular tooth pitch]
		5T-5 (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
COLD-SAW Optional		Free Profile Programming of Cold Saw Blades LOADER is used only for production

High Accuracy / High Productivity

PREMIUM-LOAD Operating Screens

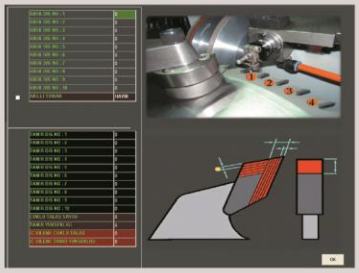
General operating screen

Calibration screen

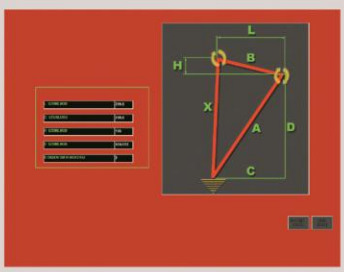


Form selection screen

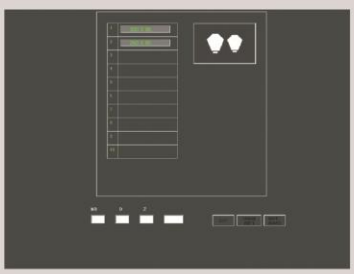
Measuring probe calibration screen



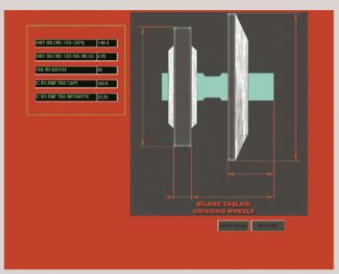
Broken tooth and repair tooth screen



Setup screen



Listing screen



Wheel calibration screen

İTOB 10011 Sok. No:6 Tekeli, 35477, Menderes, İzmir, TÜRKİYE
Phone: +90 232 782 6644 /1468 Fax: +90 232 782 2390
www.abmgroup.com.tr • info@abmgroup.com.tr