



**Sharp, Sharper, Sharpest**

**Grinding Technologies**

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BIG,  
BIGGER,  
BIGGEST

# CEO's Message

## CEO's Message



Our path on grinding technologies production started in 1965, continues applying all modern technologies on our services. Our founder Saim KESOGLU's life aim was chasing "Perfection" in order to catch excellence. This characteristic is the basics of our current goals and successes.

At ABM, we develop our machines, our own motion control systems, application software and produce all mechanics. Finally, we assemble and test the product to global machine standards. Whichever ABM machine you choose, you will know that is built to meet all market demands.

ABM's third generation of engineers, have been serving quality and high technologies to lead the ever-changing world of grinding. All ABM team's hardwork, personal determination and business spirit also have contributed to our success so far like a bridge from our earliest colleagues to the current ones. Our successes will guide us for our goals. Not only in local market; our machines are working world-wide with 5 subsidiaries, more than 25 distributors and with own sales team more than 130 different countries.

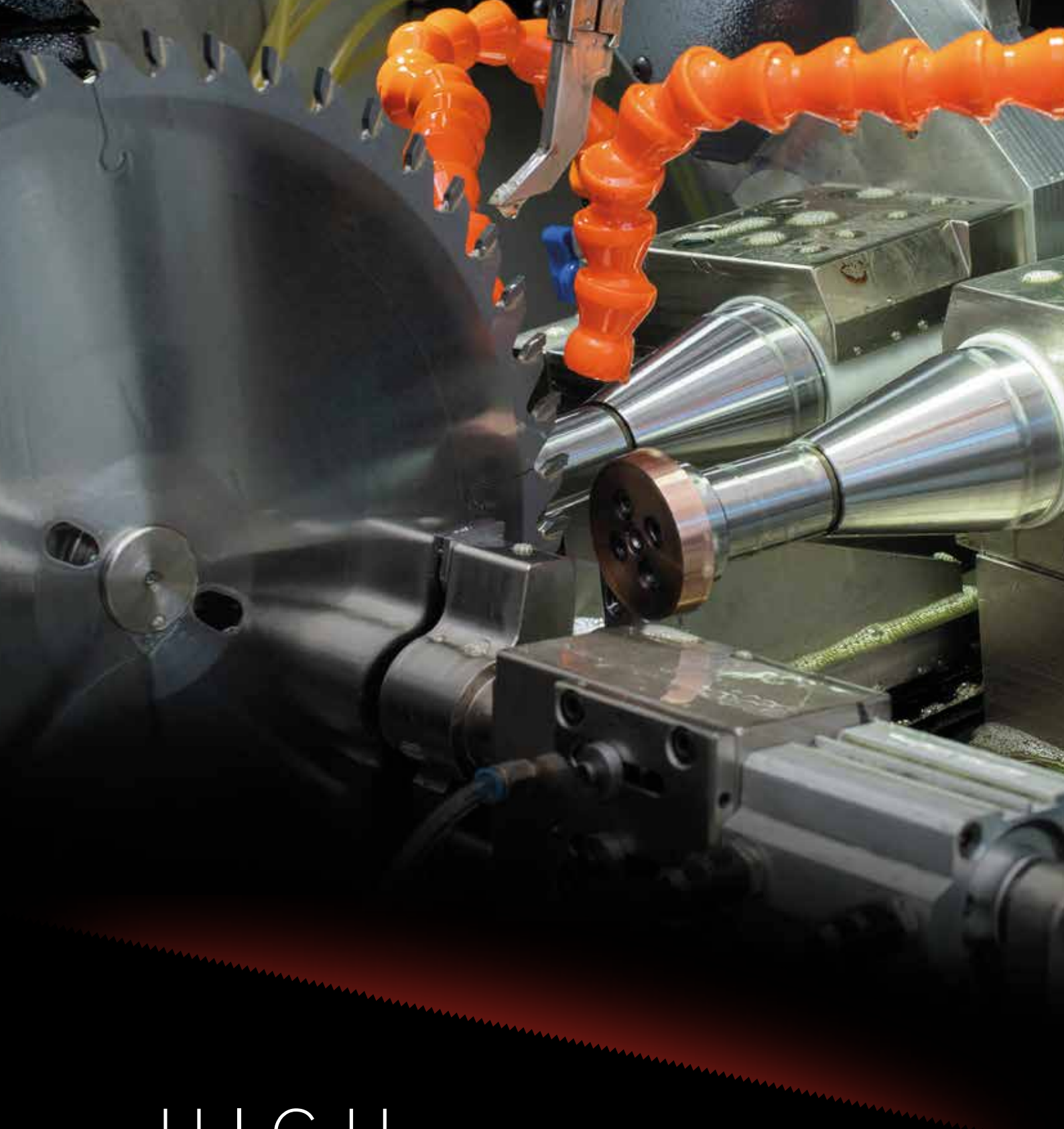
We are proud of serving our machinery in all continents from Europe to the Americas; Russia to the Australia. Our complete solutions serves to a wide range from start-ups to large industrial facilities based on the daily capacity.

The world always needs better ideas and the "true innovation" that is our driving force is the product of experience and dynamics. On our journey until today, I owe a thank to our both domestical and international partners, also to our dear customers.

The following years, in line with our aims, we will enhance our global competitiveness and the position of ABM in global markets. We will devote our whole experience and energy to carry our group to higher targets, wish you all the best.

A handwritten signature in black ink, consisting of stylized letters 'C' and 'K'.





HIGH,  
HIGHER,  
HIGHEST

# History

The company was founded by Saim KESOGLU in Yaghaneler, Izmir

1965



ABM moved to its first 3,000 m<sup>2</sup> modern factory in Menderes, Izmir

1987



First R&D department in the industry was established. R&D team had developed the own ABM PLC control system the same year

1999



First CNC controlled machines were introduced to the global markets responding all the market demands.

2005



PREMIUM-LOAD minimizing the labour was announced to the world markets as a full automatic grinding machine with robotic loading system.

2009



SPARQ PCD Disc Erosion Grinding Machine was developed for grinding PCD tools with electro-erosion technology

2011



With capacity increase, ABM started activities in third factory, the New Headquarters of 20,000 m<sup>2</sup> with latest technology in ITOB Industrial Zone, Izmir

2020



1977

First export was made to Algeria.



1993

First international exhibition was done on the world stage at International Hannover Fair



2002

The first Numerical control machine NC, automatic TCT circular saw grinder was introduced to the industry in Istanbul TUYAP exhibition.



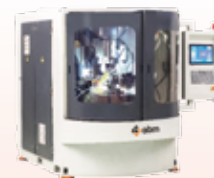
2009

Heading to the future, ABM has strengthened it's structure by becoming incorporation



2010

ABM has developed it's own motion control system with the advanced technology



2012

ABM moved to the second factory of 5,000m<sup>2</sup> in ITOB Industrial Zone, Izmir



2021

New Generation High-Tech Laser Grinding Machine , OMEGA-LASER has been developed.



SMART,  
SMARTER,  
SMARTEST





ABM, was founded by Saim Kesoglu starting in a 150 m<sup>2</sup> workplace in 1965 Yaghaneler; now continues at The Pearl of the Aegean Izmir, at ITOB Organized Industrial Zone at our 20.000 m<sup>2</sup> new Headquarters.

We as ABM, dreamt of the future and designated our goals from the beginning of our story. We realised early in our existence that production quality must be our first priority, in order to remain a permanent feature in the sector, we never gave up our customer oriented and innovative perspective and kept on going our way.

Today, we take the justified pride of being a dominant brand in the world market with sales offices in our name across 5 different countries and exporting to over 130 countries with ever increasing export figures and working eagerly to produce new innovative products.

Being the biggest grinding machine producer factory in the world, we are working to produce the best every single day, with our Professional crew and experienced engineers.

Within our factory, we develop the software for our machinery and produce all the parts in our state of the art machining facility, we are not a follower in the sector - on the contrary - with our innovative spirit, we are the pioneers of the sector that design and produce.

We are the first company of the sector that has a research and development R&D centre. Here, we advance our technological developments and enhance our knowledge and experience constantly, striving to be the best.

Having the broadest product range in the world sector, we understand your needs and cater to you completely with our experience since 1965 and our wide range of products.

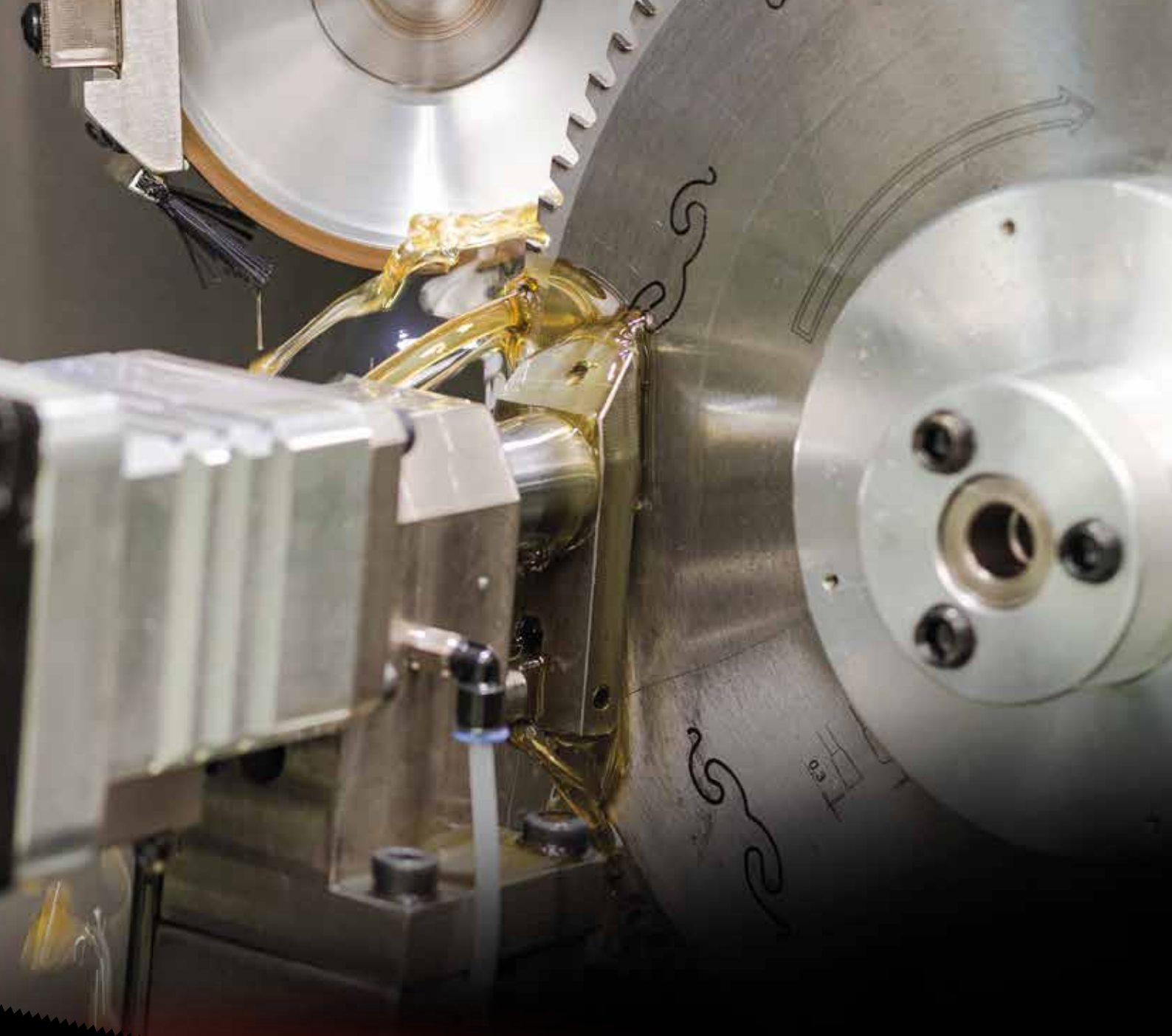
We create solutions 24/7, for the issues like spare parts supplement and malfunctions with our aftersales network and experienced technical staff.

We are assertive because we do what we know best.

As ABM family, we continue to write our chapter with our worldclass production and service mentality and still dreaming about the future.







STRONG,  
STRONGER,  
STRONGEST

# Our Policy

## Our Policy

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ABM aims to serve the highest expectations of being considered for sales and after-sales services so that the end-users can benefit of our wide range from design to the product. In order for organizations that purchase goods or services to always prefer our company, we must correctly perceive their wishes and expectations and offer the best quality products and services to the most appropriate figures at the right time. ABM, with the vision that can see the needs of the future today, has determined to contribute to the development of the world and to be a solution partner to great ideas and innovation as its strategic goal.

Quality, reasonable pricing and ease of use will always be taken into account in the products or product groups designed in the new machines, taking into account the customer expectations and new requirements. These goals with complete and timely fulfillment is achieved through a systematic study.

ABM always considers these principles in the training of all its employees, in sales and after-sales customer relations, ease of communication and in the services to be provided in order to achieve these goals. In summary:

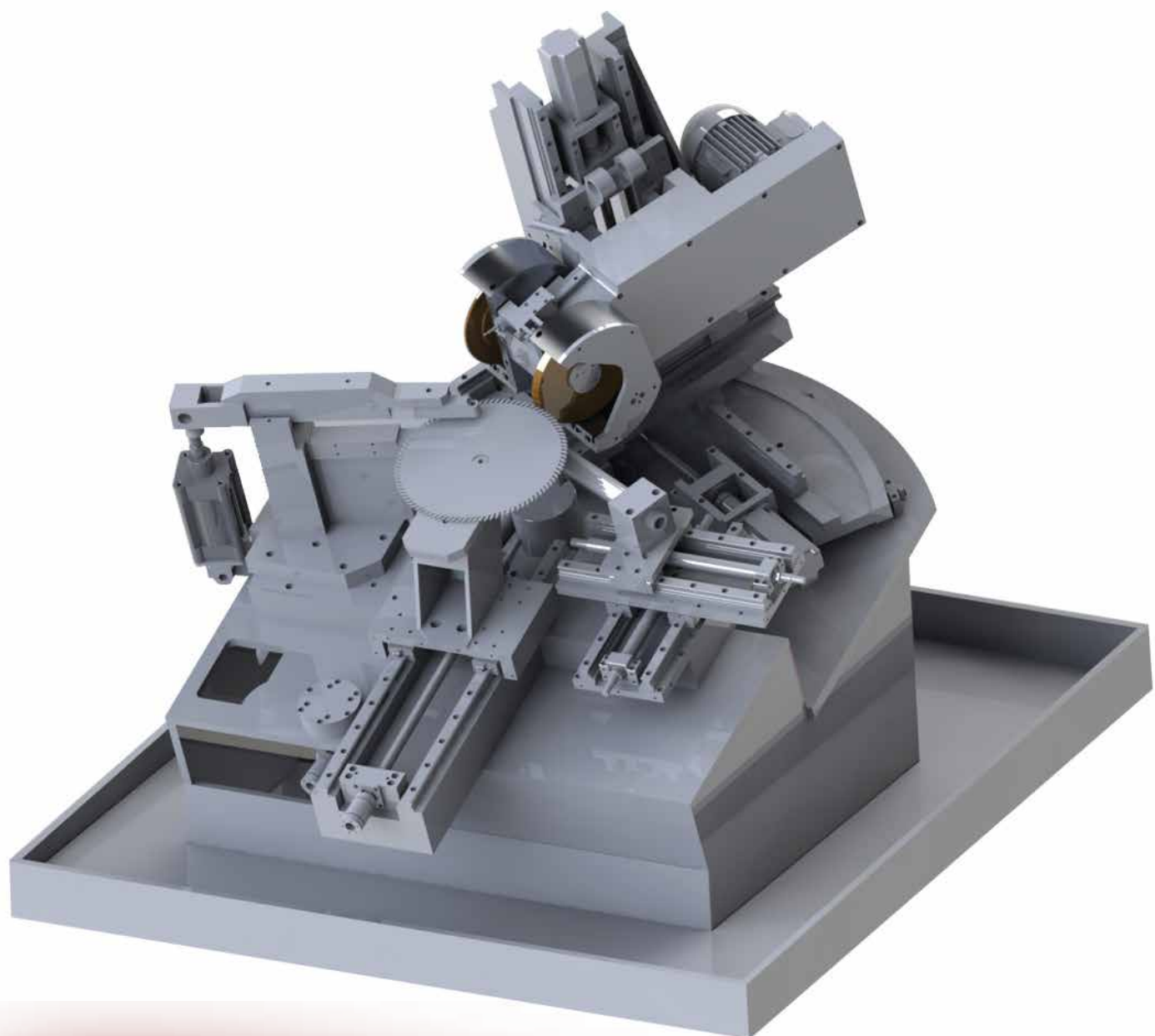
- Our presence take a meaning with our customers' trust.
- Our goal is perfection.
- Our aim is continous and dynamic improvement.
- Our staff are our most powerful investments.





NEW,  
NEWER,  
NEWEST





HEAVY,  
HEAVIER,  
HEAVIEST

# Activity Areas

## Activity Areas

Since 1965, ABM has been serving the most advanced technologies of the world by producing grinding, welding and eroding machines. In every cutting application of various industries, a perfect grinding quality is required for efficiency and super finishing quality. With long-years experience, we have always aimed at the best and the most advanced technologies and also regarded the customer satisfaction as a priority.

To help today's grinding solutions, we are proud to present to the world market the practical, ideal, the most competitive products and state-of-the-art technologies in reasonable prices as a result of our comprehensive R&D.

Our Circular saw, Band Saw, Round Tools and Knife grinding machines completes the whole range in the world of grinding solutions. ABM is the Unique company in the world which can offer this complete range of machines in various industries. Also by developing the new geometries, tool forms and techniques that are being used in today's technology, our machines reasonably ease the tough and severe grinding environments for the operators working with grinding machines.

ABM grinding machines provide complete solutions to meet the needs of grinding lines, saw blade service rooms, tool manufacturers and in-plant grinding machines by offering conventional to versatile, and CNC multi-function and robotic machines.

We also offer complete projects of turn-key facilities for cutting tools production of various industries.



METAL INDUSTRY



FURNITURE INDUSTRY



SAW MILL INDUSTRY



PRINTING INDUSTRY



RECYCLING INDUSTRY



TEXTILE INDUSTRY



TUBE INDUSTRY



ROLLING MILL



FOOD INDUSTRY



Products

Products



# Premium Series



Premium Series 16 Axes Servo Motor Controlled, 5 Loading Stations, Oil Coolant, Industrial PC Controlled, 15" LCD Display, Automatic Measuring by Touch Probe, Compensation and Tooth Data Recognition. Premium Series 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 central body, face, top and side grinding machine are together. With high efficiency, loss of time in your production is prevented. Free programming feature has a wide production capability of woodworking and metalworking blades. Premium Series, grind all tooth forms of TCT circular saw blades in only one pass, ensure a perfect and top quality level grinding thanks to the Peripheral Grinding Technology. Premium has maximum capacity of Ø 850mm saw blades. In addition, a 3-station or 5-station Robot system with automatic loading can be included. For the other side of the loader, side grinder Premium DUO 850 machine can be included to the autoloader system, also a second top and face grinder can be connected. It can grind an average of 4 circular saws per hour at optimal speeds.

## T.C.T. Circular Saw Group

# CNC Series



CNC Series are produced in two capacities, to grind maximum Ø650mm and Ø810mm TCT saw blades. CNC Series is distinguished by its high speed as a 7-axes CNC controlled top and face grinding machine that is capable of grinding all tooth forms on wood and aluminium blades. Free programming function is also possible for tooth geometries of various industries.

Independent grinding speeds can be selected for grinding flats, rights and lefts. Clamping by Microstep system ensures automatic clamping distance control, clamping torque control and blade thickness control for different blade thicknesses and self centering bevels. Central lubrication system reducing maintenance and increasing machine life. Special plating on mechanical components ensure non-corroding and hardening. Operator friendly machine program interface for ease of use. It can grind an average of 4 circular saws per hour at optimal speeds.

## T.C.T. Circular Saw Group

# Otomat Series

Otomat Series



OTOMAT Series are designed to grind TCT circular saw blades, generally used for cutting timber, pressboard, PVC and aluminium. The OTOMAT Series is capable of grinding standard tooth shapes on carbide tipped circular saw blades up to Ø750mm. There are two different kinds of grinding processes as top and face grinding which can be performed with this machine. There are Otomat-96 (Full cabin), Otomat Eco (Half cabin) and Otomat-M(Manual bevel) machine options. These models are mainly recommended for saw mills or furniture companies for their own use or for saw services that are newly starting the business. It can grind an average of 2 complete circular saws per hour at optimal speeds.



# Duo Series

## Duo Series



CNC-DUO is an ideal machine for carbide-tipped circular saws production. With CNC control all desired geometric settings can be performed from display. User-friendly interface and machine's ease of use minimizes need for intervention by operator. It is high speed and precision full 8-axis CNC controlled side grinding machine. There are 2 different machine options as CNC DUO and Premium DUO. CNC-DUO has 2 different capacity options as Ø650 and Ø 850. Tangential and Radial clearances can be easily adjusted from the CNC control panel. CNC-DUO is recommended for primary industry and saw blade producers. CNC-DUO can grind an average of 2 circular saws per hour at optimal speeds. Premium-DUO can grind an average of 3 circular saws per hour and also it has option for robot loading.

# Otosad Series

Otosad Series



OTOSAD-Series automatic hydraulic steel reliever machines provide automatic relieving of straight, beveled or anti-kickback shoulders of saw bodies in one cycle. OTOSAD-Series is designed specially for relief grinding of TCT circular saw blade bodies. When the saw tip (carbide) reaches the level of the saw body (steel), this machine increases the grinding life of the saw and also helps the saw blade to make a smooth cut. It is recommended for Professional saw blade services. The same model can also be offered to remove the body of Hogger tools optionally. There are 2 models as Otosad-98 full cabin and Otosad-Eco as half cabin. It can grind an average of 5 circular saws per hour at optimal speeds.

## HSS Circular Saw Group

# Prestige Series

### Prestige Series



PRESTIGE Series are designed for high efficiency and quantity of HSS circular saws tootinging and regrinding services. Our unique design of this model, minimize human labor; with robot loading system and in compact central body, all forms of grinding would be done in one setup. The machine has laser system for tooth counting and there is measuring probe for automatic tooth data collection and self centering. Machine has Chipbreaker system option and CERMET tooth option for metalcutting TCT saw blades. Robot loading system can be adapted to this model for high capacity requirements.

PRESTIGE Series, for all tooth forms of HSS and CERMET circular saws in only one pass, ensures a perfect tootinging. At optimal speeds, an average of 4 circular saws can be regrinded per hour in the form of grinding, and 2 to 3 circular saws in the form of production.



## HSS Circular Saw Group

# PNK Series

PNK Series



PNK Series provides full automatic process for the HSS circular saw blades of complete tooth removing, re-toothing, re-grinding and chamfering. PNK Series is an ideal machine for the complete machining of metalworking HSS and friction circular saw blades. Thanks to the interface, with only 3 parameters entered as number of tooth (or tooth pitch) , diameter and blade thickness, the blade setup is finished according to international standards automatically. Fast and precise adjustment is done by manual handwheel. Optionally Chipbreaker attachment or Auto-setting function can be added to the machine setup. At optimal speeds, an average of 4 circular saws can be regrinded per hour in the form of grinding, and 2 to 3 circular saws in the form of production.

## HSS Circular Saw Group

# PNK-600

PNK-600



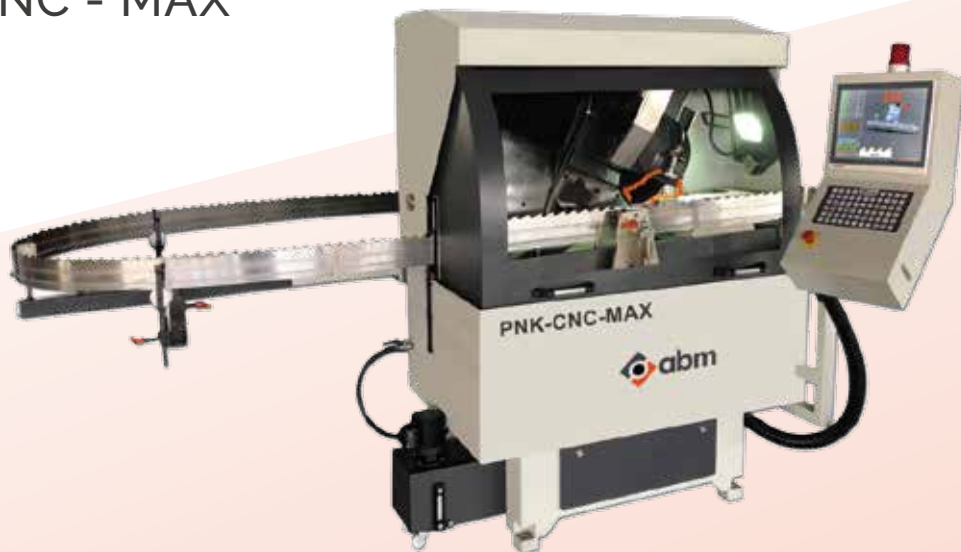
PNK-600 is specially designed for regrinding, tooting of HSS, segmental and CrV circular saw blades used in metal cutting. Optional software is available for TCT metalworking saw blades. Fully automatic and complete processing is done including chamfering with a separate setup.

PNK-600 is an ideal machine for the complete machining of metalworking circular saws. It guarantees optimum grinding quality with its state-of-the-art technology. It is a compact model with reasonable pricing level, mostly recommended for endusers or saw services.

At optimal speeds, tooth profiles can be done with an average of 4 circular saws can be grinded per hour in the form of grinding, and 2 to 3 circular saws in the form of production.

# CNC Band Saw Grinder

PNK-CNC - MAX



PNK-CNC Series Automatic Band Saws Grinding Machine, 3 axes Servo Motor Controlled. PNK-CNC Series is designed to grind all types of band saw blades. All various tooth forms are available including the variable tooth pitch geometries. Machine has an option for automatic wheel dressing for customers that would like to use ceramic or bakelite wheels. For heavy duty saws up to 320mm band saw width, this model is recommended to customers. The band saw, which has a 40mm tooth pitch of 10 meters, takes an average of 30-45 minutes to be grinded at optimal speeds.

# Mechanical Band Saw Grinder

PNK - SB



PNK-Series is designed to grind various band saws in various forms, width and thicknesses. Compact and rigid grinding unit of PNK-Series machine provides precise and stable grinding. It has a high flexibility to make all tooth profiles in the industry. PNK Series are offered as 3 different models as PNK-AB , PNK-SB (Semi Cabin) and PNK-SP (Full Cabin). PNK-AB is offered for band saw width up to 120mm, PNK-SB and PNK-SP models are offered for band saw width up to 160mm. The band saw, which has a 40mm tooth pitch of 10 meters, takes an average of 1 hour to be grinded at optimal speeds.



# EM-CNC

## EM - CNC



EM-CNC is an ideal machine to equalize both sides of the stellite tipped or swaged band saw teeth. EM-CNC simultaneously grinds two sides of the band saw teeth to provide flawless surface quality of the material cutting. The CNC interface allow to adjust the radial clearances from the panel and eases the operation. It is an ideal machine for tight tolerances and mass production of band saw blades. For heavy duty saws up to 320mm band saw width, this model is recommended to customers.

The band saw, which has a 40mm tooth pitch of 10 meters, takes an average of 1 hour to grinded at optimal speeds.

# Stellite Tipping Machine

## Stellite Tipping Machine



SAT-200 Stellite Tipping Machine is an ideal machine for full automatic stellite tipping of band, frame and circular saw blades. Patented special stellite tipping system ensures a variable joining of stellite to saw blade body than any system worldwide. This new system minimizes the side and profile grinding times. Tooth molds are used for the tipping process, ease of use and minimized welding time for band saw producers, regrinding shops and also end-users. From the worldwide creator of new grinding technologies, thanks to the CNC technology various parameters can be adjusted independantly from the control panel. .For heavy duty saws up to 320mm band saw width, this model is recommended to customers. The tipping time of the band saw with a 40mm tooth pitch of 10 meters at optimal speeds is an average of 1 hour, including annealing.

## Tool Grinders

# PCD Tools Grinding

### PCD Tools Grinding



SPARQ PCD Tools Grinder is designed to produce and service PCD cutters. SPARQ is a unique, PC controlled, built in one central construction for top erosion process of PCD tools. SPARQ guarantees a smooth top erosion process more than any on the market. ABM digital erosion generator ensures a flexibility of setups and a longer lifetime. Standard machine has capacity of Ø400mm. There are three packages available as basic package for endmills and premilling cutters. The other packages are for saw blades and hogs, the third package is for profiled tools.

There is also a Sparq DUO machine option for side erosion grinding. It can make 1.38mm feed per minute with 0.2mm infeed at optimal speeds.

## Tool Grinders

# Laser Grinding

### Laser Grinding



The future technology of grinding by laser ablation. OMEGA-LASER combines precision, flexibility, compact design, versatility and status processing in one machine. 5-axis design and CNC control system helps for the production of perfect precision tools up to Ø300mm.

OMEGA-LASER technology creates new machining possibilities, works through diamond and binding material which creates perfect cutting edges without break-outs. While on the conventional grinding diamond grains are break-out or eroding process only the binding material is eroded. With this new technology, coarse-grained PCD grades can also be processed without loss of quality and chip breaker grooves are possible to do with only one clamping. HSK toolholders are used with highly compact handling of the tools and market availability for various gripping systems.

Laser technology enables contact-free precision machining without tool wear. Lower operating costs by eliminating the need for consumable materials like erosion discs, coolant and grinding wheels. An environment friendly technology of the future.



## Tool Grinders

# Helios 5X

## Helios 5X



HELIOS 5X is ideal for various type of tools from regrinding to production. It's best performance and productivity range is for tools up to Ø300mm.

The HMI machine interface contains several features to make an operator programming easier. These include a 21,5" touch screen, adjustable panel positions, handwheel for easier set-up and an easy to access dividing head & working area.

Every design on the machine; from the positioning of the grinding wheels available on separate two spindles, to the BECKHOFF absolute motors, have been developed to enhance accuracy, increase productivity and make an efficient operation.

Basic Tool Studio includes the software package of endmills, while 3D simulation, drills, profile tools, burrs, routers, reamers and many other special applications are supplied optionally.

## Tool Grinders

# Universal Tool Grinding



UTB Series, Hydraulic Universal Tool Grinder is designed specially to grind the universal tools in woodworking and metal industries. UTB range offers you ideal prerequisites for perfect sharpening by means of its hydraulic driven linear rail axis.

On hydraulic models, longitudinal travel in X-Axis could be adjusted independently. Different attachments are also available for grinding PowerLock Moulders, Panelling Cutters, Straight Milling Cutters, Router Bits, Shank type tools and Finger-Joint Knives. Because the knives are sharpened in the cutterhead, it ensures a vibration free cutting. UTB model is the basic model with manual operation while UTB-H and UTB-Power range offers hydraulic grinding axis for smooth surface. On UTB-Power model the basis for the high precision of the machine is the massive spindle carrier clamped by HSK system. There is also an option for Motorized Dividing Head where the machine operator must only enter the working parameters and start the machine. While the tool is being sharpened the operator can pursue other activities because the machine works completely independent.

## Knife Grinders

# OP Series



OP Series is specially designed to grind the knives with grinding lengths ranging from 1050mm up to 5000 mm length mainly for wood, metal and paper industries. Mainly all type of industrial blades can be processed with OP models including paper knives, chipper knives, planner knives for wood, recycling blades for plastic (granulating knives), peeling and veneer knives, slitter blades, guillotine knives, and Tungsten carbide edged blades. For smaller planner knives and cutters, also OPB basic models are available.

OP series are constructed by linear rail system for high efficiency and longer life. Knives mounted on magnetic table could be rotated 0° to 180° on both directions. As an option, it could also be produced with only as mechanical table or magnetic table and mechanical tables together. There are 8 variable speeds up to 11m /min with microprocessor control, programmable automatic working cycle, roughing, finishing and spark-out functions. Controls for fast up and down and slow down approach of the grinding wheel are located on the panel. Coolant ready system, possibility of optional magnetic separator. Various other options offer solutions according to your custom needs. Optional motor power upgrade features a high power grinding wheel motor making it suitable for knife manufacturing, re-grinding large quantities of knives and surface grinding work-pieces of considerable sizes.

**We are dedicated to make sharp sharper,  
Until we reach the sharpest...**



**İTOB Atatürk Cad. No: 56, 35471 Menderes - İZMİR / TÜRKİYE**

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Some variants of machine models are not available for German market.