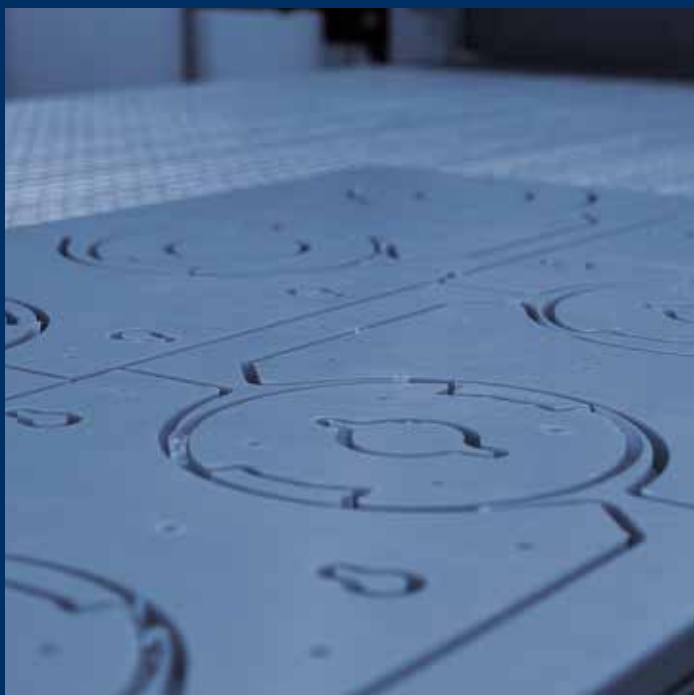


# cms time 100

3/5-axis CNC machining centers  
(Z clearance up to 500 mm)





CMS is part of SCM Group, a technological world leader in processing a wide range of materials: wood, plastic, glass, stone, metal and composites. The Group companies operating throughout the world are reliable partners of leading manufacturing industries in various market sectors, including the furniture, construction, automotive, aerospace, ship-building, and plastic processing industries. SCM Group coordinates, supports and develops a system of industrial excellence in 3 large highly specialized production centers employing more than 4,000 workers and operating in all 5 continents. SCM Group can offer the most advanced expertise worldwide in the design and construction of machinery and components for industrial processing.

CMS SpA manufactures machinery and systems for processing composite materials, carbon fiber, aluminum, light alloys, plastic, glass, stone, and metals. It was established in 1969 by Pietro Aceti, with the aim of offering customized and state-of-the-art solutions based on an in-depth understanding of customers' production needs. Significant technological innovations originating from substantial investments in research and development and take-overs of premium companies have led to constant growth in the various sectors.



**CMS Advanced Materials Technology** is a leader in the field of numerically controlled machining centers for the working of advanced materials: composites, carbon fibre, aluminum, light alloys and metal. Substantial investments in research and development have allowed the brand to always be on the forefront of cutting-edge design, with machines that ensure best-in-class performance in terms of accuracy, speed of execution, and reliability; meeting the needs of customers operating in the most demanding divisions. Since the early 2000's, **CMS Advanced Materials Technology** has established itself as a technology partner in areas of excellence such as aerospace, aviation, automotive, race boating, Formula 1, and the most advanced railway industry.



# cms time 100

**Adaptable.**  
**Global.**  
**Innovative.**  
**Lean.**  
**Efficient solutions.**

The **AGILE** way for  
sheets cutting.

TIME 100	
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# TIME 100

## TECHNOLOGICAL BENEFITS



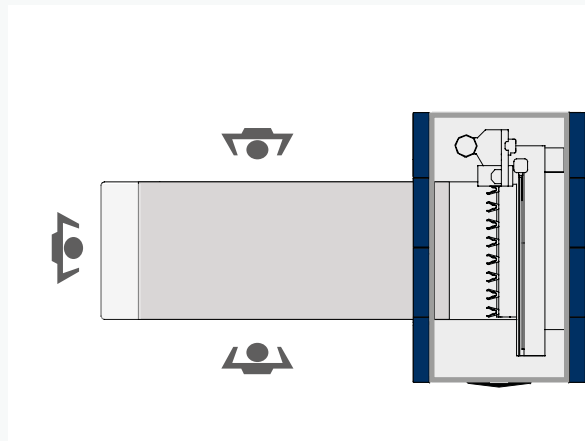
LEARN MORE

### 3/5-AXIS CNC MACHINING CENTERS, PASSAGE IN Z UP TO 500 MM

Machining center designed and engineered for advanced materials and plastics processing; its unique design and PRO-SPACE safety system means it requires little space and is accessible from all sides for handling panels or small components.

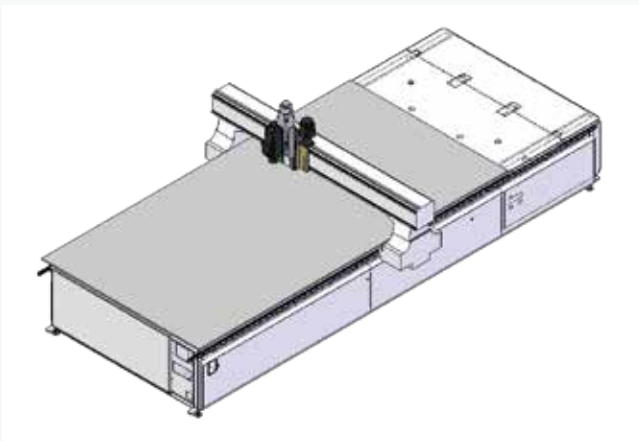
#### KEY BUYER BENEFITS

- + A **high-performance, essential and flexible** 3-axis machining center with advanced technical solutions and an unmatched **performance/price** ratio
- + **High-level** performance that can uniquely combine the needs of all **processing** sectors, from **signage** through **nesting to engineering parts**.
- + **Compact dimensions** thanks to the "pro-space" solution



#### MINIMUM FOOTPRINT AND MAXIMUM FLEXIBILITY: "PRO-SPACE" PROTECTION

Completely free loading area to minimize occupied space.  
The absence of perimeter guards allows access to the worktable from all sides of the machine.



#### COMPLETE ABSENCE OF VIBRATION: MOVING GANTRY STRUCTURE

Unparalleled machining performance thanks to the moving gantry structure, which offers high processing speeds while always ensuring the parts produced are of the best quality.





# OPERATING UNIT

# TOOLS



## EXCELLENT PRECISION AND FLEXIBILITY

In any condition of use with the 3- or 4-axis milling unit of up to 15 kW power.  
In order to ensure consistent performance even during the most demanding sheet machining, the electrospindle can be equipped with a liquid cooling unit to maintain a constant operating temperature.



Maximum versatility thanks to the **TR** side magazine, which greatly reduces tool change times. The ideal solution for reducing cycle times, particularly when trimming flat or advanced materials and plastic sheets.



## MACHINING WITHOUT LIMITS: INTERPOLATING VECTOR AXIS

Angular-transmission heads with automatic 360-degree rotation and X-Y positioning on the worktable using the digitally controlled CNC interpolating vector axis.



Single-position "**Pick-up**" magazine with pneumatic positioning anchored to the moving beam.  
The ideal setup for the use of bulky angular transmission heads.

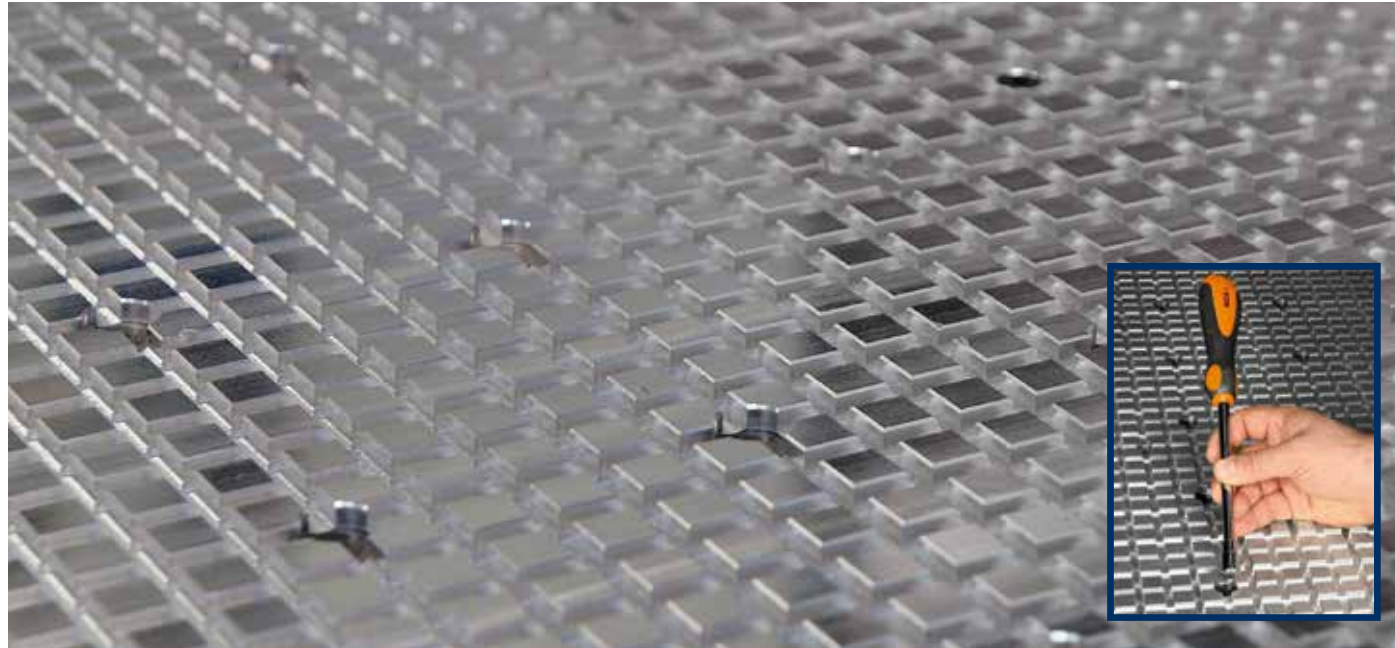


## Console with built-in PC

An industrial PC with 21.5-inch full HD multi-touch color display, on a support base with wheels so that the console can be moved easily around the machine perimeter.



# WORKTABLES



## "H.E." WORKTABLE (High Efficiency)

A rolled aluminum frame makes the worktable sturdy, practical and non-deformable. Easy and fast tooling with the magnetic vacuum shut-off system: in just a few seconds the vacuum is directed only to the workpiece positioning area.



A wide selection of MPS and MODULSET suction cups to clamp workpieces to the worktable, depending on the machining to be done. These devices are especially effective for the most complex machining of sheets and engineering parts.



## MAXIMUM EFFECTIVENESS IN ALL WORK SITUATIONS: PRESSER ROLLERS

Perfect clamping of small workpieces and strips in poor vacuum conditions. Presser rollers press close to the milling zone, making them ideal for machining stacked panels. For milling that does not require them, the rollers are disabled without affecting the machine performance.

# LOADING AND UNLOADING



**100% productivity** with the pusher moving the machined parts to the unloading belt.



**Zero dust** and maximum plastic chip removal with the top suction system for cleaning the worktable.



# RANGE OF HEADS AND DEVICES FOR ADVANCED MATERIAL MACHINING

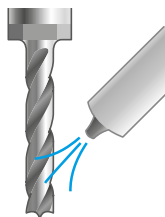


A range of heads specifically for machining advanced materials such as plexiglass, plastic, alucobond, aluminum, polyurethane foams, and honeycomb board.

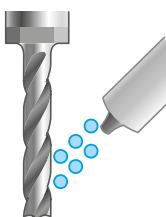


**OPTISCOUT**  
Device for measuring reference points on plastic or paper material, for rotranslation of the program according to the actual workpiece position on the bed.

## DEVICES FOR SPECIAL APPLICATIONS



**Blower on the electrospindle**  
Suitable for many applications and particularly in trimming flat or thermoformed plastic sheets.



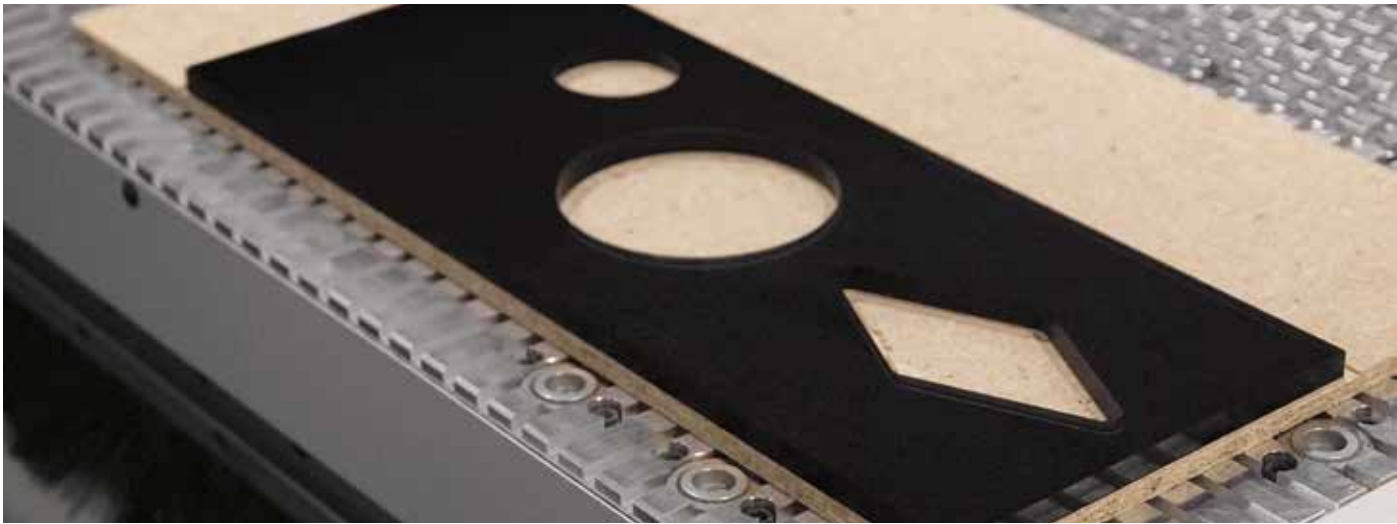
**Ionized air blower on the electrospindle**  
Suitable for eliminating electrostatic charge build-up from cut material, making suction easier.



**Air blower with micro-lubrication**  
Blower with air and a small amount of oil suitable for lubricating and cooling the tool when machining non-ferrous metals.



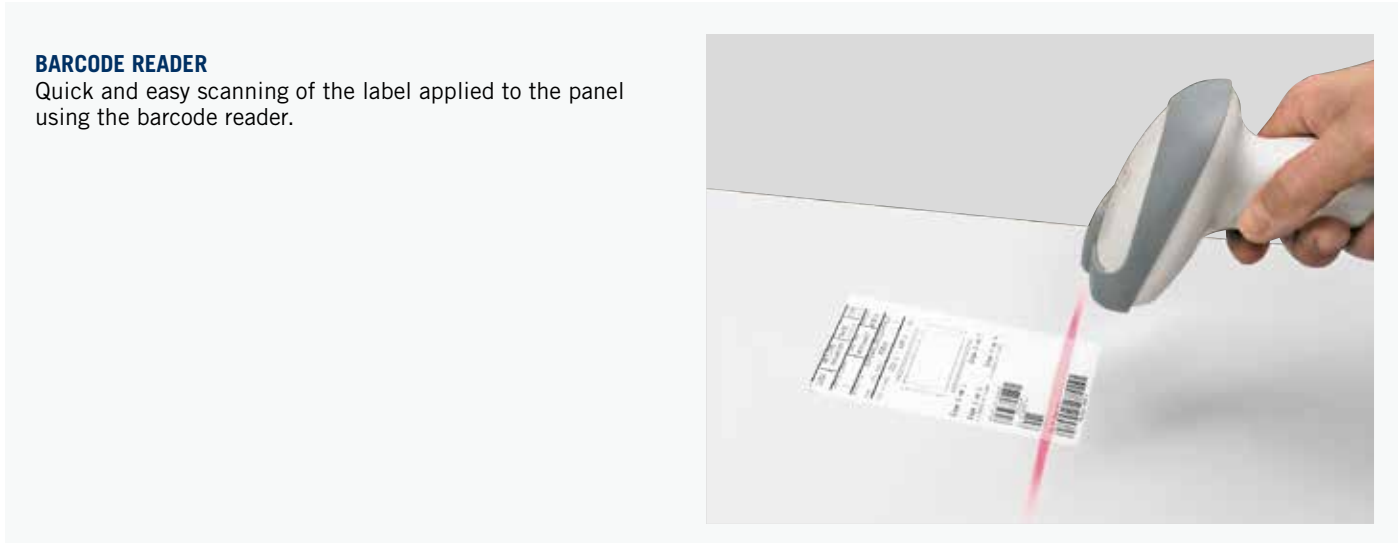
**Protection of X-Y axis guides**  
A dedicated cleaning and protection system means that even abrasive materials can be machined.



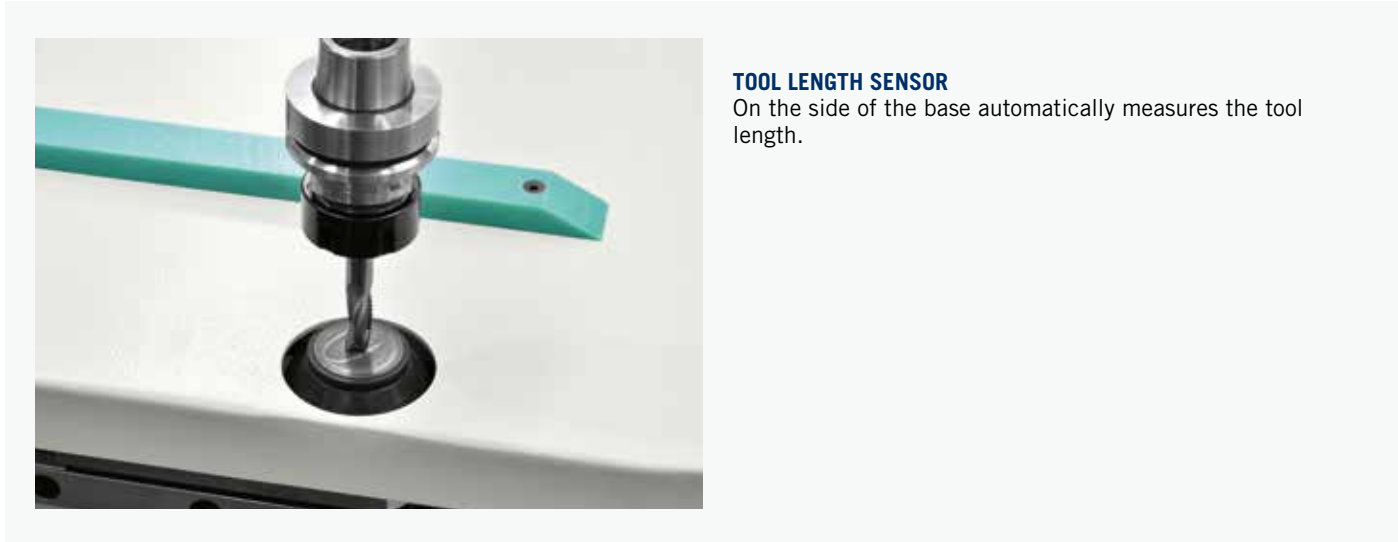
# OTHER DEVICES



**EVERYTHING AT YOUR FINGERTIPS: TECPAD CONTROL**  
Machine control management with the 7" color touch-screen remote control for faster, easier set-up.



**BARCODE READER**  
Quick and easy scanning of the label applied to the panel using the barcode reader.



**TOOL LENGTH SENSOR**  
On the side of the base automatically measures the tool length.

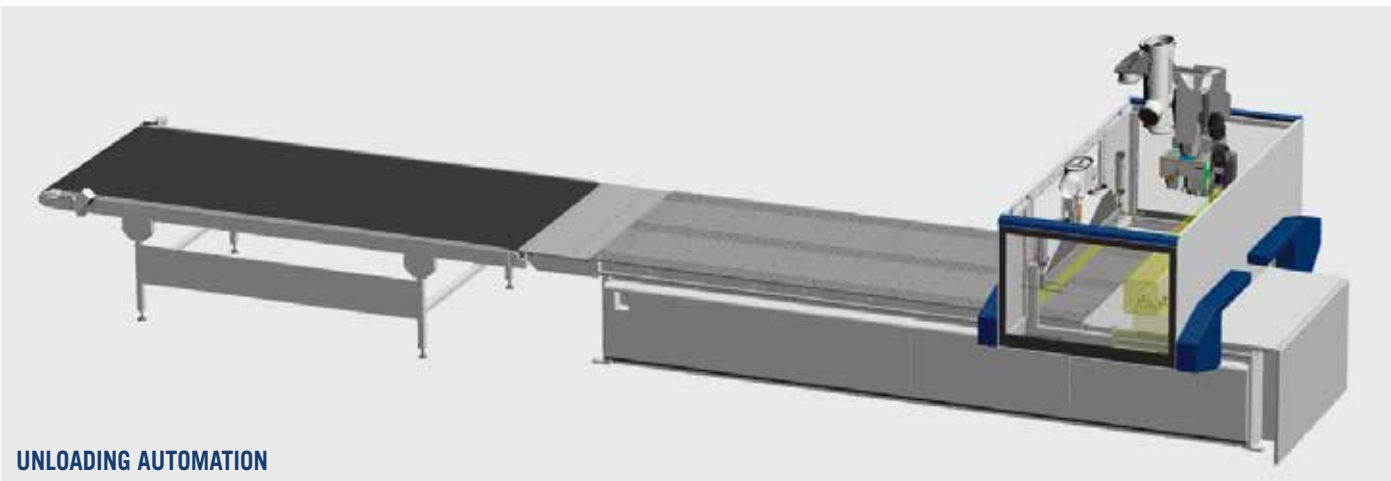
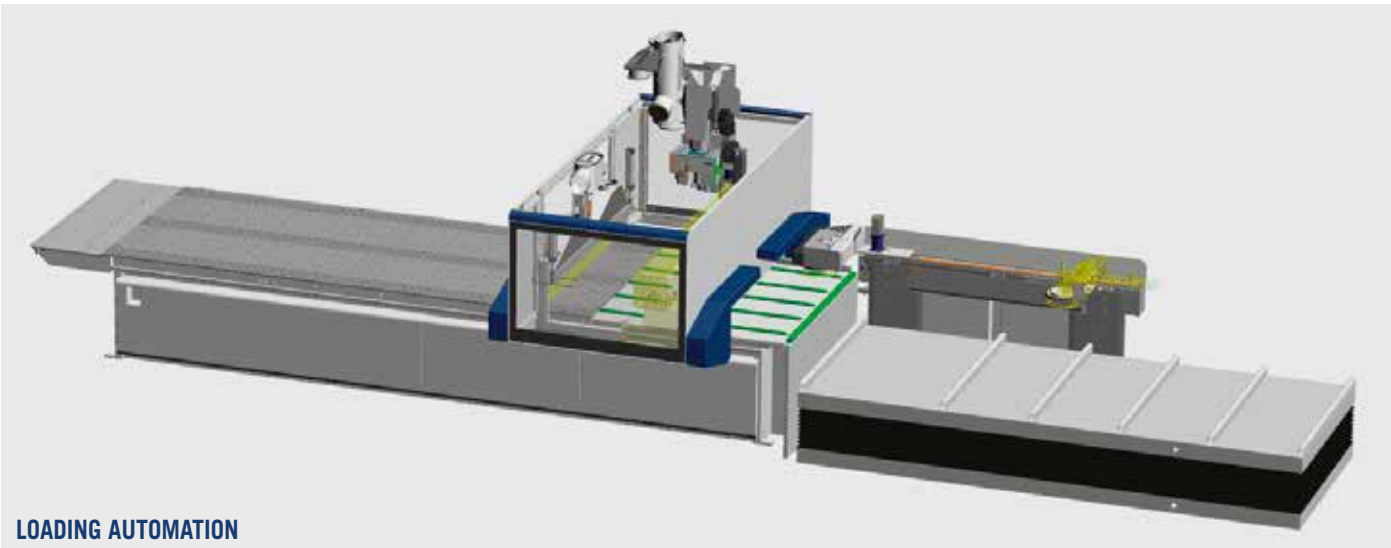
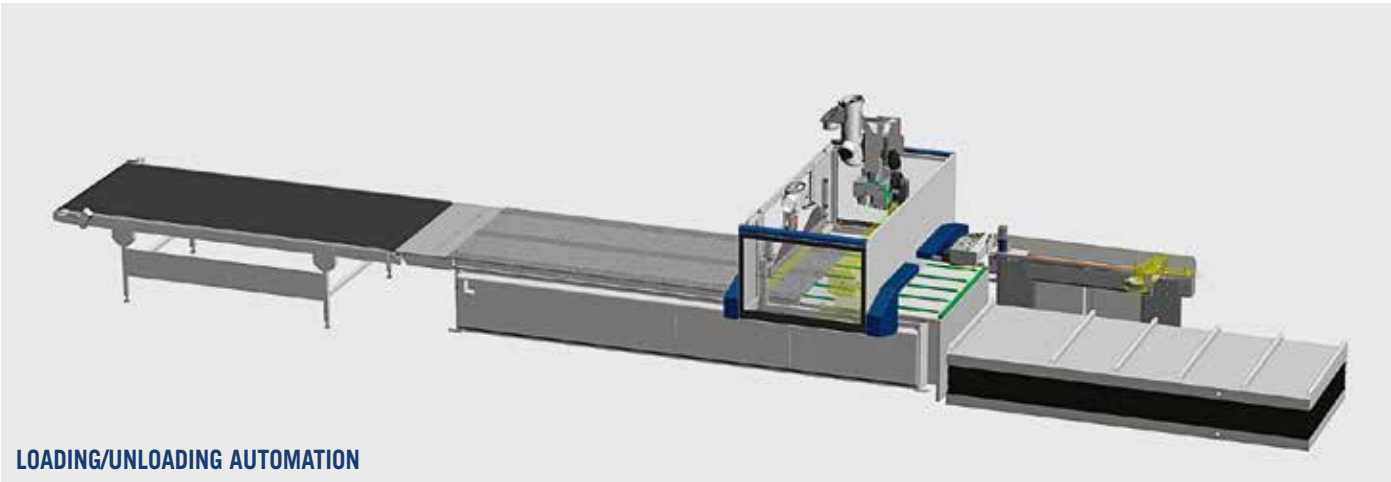


**A WIDE CHOICE OF CUSTOMIZATION TO COVER EVERY NEED WHEN MACHINING SHEETS, THERMOFORMED PARTS AND ENGINEERING PARTS**  
1-, 2- and 4-output angle-transmission heads with HSK taper attachments for angular milling, drilling and blade-cutting processes, with coupling and backlash recovery, or fixed mechanical coupling.

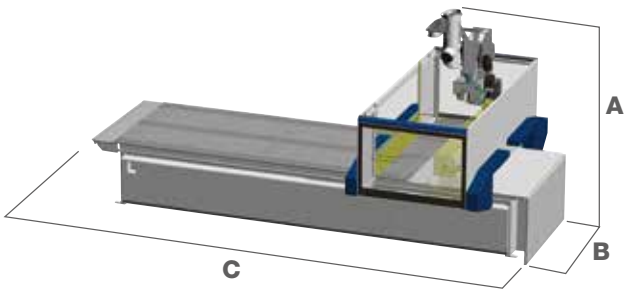


# MACHINE CONFIGURATIONS

Machines available with nesting cell configurations with loading elevators and unloading belts (loading only or unloading only versions are also available), as well as left and right versions.



# TECHNICAL DATA



"PRO SPACE" OVERALL DIMENSIONS			
	A	B	C
mm	2190	2552 (3552*)	4565 (5570*)
mm	2190	2852 (3852*)	5765 (6770*)
mm	2190	3152 (4152*)	5765 (6770*)
mm	2190	3472 (4472*)	5215 (6215*)
mm	2190	3472 (4472*)	6402 (7400*)

\* including operational space

CMS TIME 100		TECHNICAL DATA				
		12	15	18	22-31	22-43
AXES						
X-Y AXIS VECTOR SPEED	m/min	35	35	35	35	35
Z-AXIS TRAVEL	mm	250	250	250	250	250
Workpiece Z clearance / Panel Z clearance	mm	150	150	150	150	150
MILLING UNIT						
Motor power (max.)	kW	15 (21)	15 (21)	15 (21)	15 (21)	15 (21)
Rotation speed (max.)	rpm	24000	24000	24000	24000	24000
Tools available in the magazine (max.)	positions	12	15	17	20	20
DRILLING UNIT						
Independent vertical spindles (max.)	no.	12	12	12	12	12
Independent horizontal spindles (max.)	no.	6	6	6	6	6
Rotation speed (max.)	rpm	8000	8000	8000	8000	8000
Integrated X blade, diameter	mm	125	125	125	125	125
Integrated blade rotation speed (max.)	rpm	10000	10000	10000	10000	10000
INSTALLATION						
Intake air consumption *	m³/h	3400/5300	3400/5300	3400/5300	3400/5300	3400/5300
Air intake speed	m/sec	30	30	30	30	30
Intake port diameter	mm	200/250	200/250	200/250	200/250	200/250
Vacuum management 50 Hz	no. of pumps (up to)	4	4	4	4	4
Vacuum management	m³/h	250	250	250	250	250

\* stand alone/with pusher





# Maestro cnc

Office, the Maestro cnc design and programming system ensures that milling, drilling, cutting, etc. machining processes can be programmed quickly and easily.

This is due to the 3D graphical representation of the workpieces and the support provided by the ready-to-use apps and macros to create any machining process with a click of the mouse. Another click and the CNC programs are generated automatically.

## SOFTWARE

### OFFICE



# Maestro active cnc

Maestro active is our new interface. An operator can easily guide different machines as the Maestro active interface software maintains the same look&feel, icons and approach to interaction.

#### EASE OF USE

The new interface has been specially designed and optimized for immediate use via a touch screen. Graphics and icons have been redesigned to make navigation simple and comfortable.

#### ZERO ERRORS

Improved productivity with built-in help and recovery procedures that reduce the possibility of operator error.

## SOFTWARE

### FACTORY

## Maestro cnc

### THE SOFTWARE THAT MAKES WORK EASIER

CAD/CAM programming software for designing any production process. Developed in the Windows® environment, this advanced, simple and user-friendly sketching environment provides customers with all the tools they need for drawing parts and arranging them on the worktable, and managing the tools and related machining, all in a perfectly integrated and high-performance context, making programming very easy.

#### ADDITIONAL FUNCTIONS



##### Maestro pro view - Unique for 3D simulation

3D simulator that gives the users a three-dimensional model of their machine in order to view the machining processes that will be performed during production in advance on their PC in the office.



##### Maestro 3d - Unique for creating 3d objects

Integrated module for programming three-dimensional objects on 5-axis machining centers.



##### Maestro apps - Unique for know-how

Maestro apps is a library of immediately available and easy-to-use programming functions, developed specifically for machining parts from plastics.



##### Maestro msl connector - Full integration

Connect with third-party design software.

## Maestro active cnc

### REVOLUTIONARY INTERACTION WITH YOUR CMS MACHINE TOOL FOR MACHINING PLASTIC

#### MAXIMUM CONTROL OF PRODUCTION PERFORMANCE

Generating customizable reports by operator, shift, schedule, timeframe (and more) makes it possible to monitor, optimize and improve production performance.

#### FULL KNOWLEDGE OF MACHINE EVENTS AND SHARING OF OPERATOR EXPERIENCE

Maestro active records maintenance, training and other events, tracking all activities within a database. The ability to comment and document all production events or notifications stores the operator's know-how and makes it available to the company.

#### ADVANCED PRODUCTION ORGANIZATION

Maestro active can configure different users with different roles and responsibilities depending on how they use the machine (e.g. operator, maintenance technician, administrator, ...). It is also possible to define work shifts on the machine and then measure the activities, productivity and events that occurred during each shift.

#### ABSOLUTE FINISHED PART QUALITY

With Maestro active, the quality of the finished part is no longer jeopardized by worn tools. The new Tool Life Determination System in Maestro active sends notification messages as the end of tool service life approaches, and recommends replacement at the most opportune time.

#### TOOLING? NO PROBLEM!

Maestro active guides the operator through tool magazine set-up, taking the programs to be executed into account.

# THE RANGE OF CMS ADVANCED MATERIALS TECHNOLOGY

# FOR COMPOSITES, ALUMINUM AND METAL PROCESSING

## MONOBLOC CNC MACHINING CENTERS FOR VERTICAL MILLING



**ANTARES MK3**

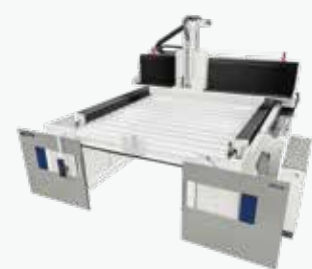


**ARES**



**ETHOS K**

## GANTRY CNC MACHINING CENTERS FOR LARGE-SIZE WORK AREAS



**ETHOS**



**POSEIDON**



**CONCEPT**

## 3/5-AXIS CNC MACHINING CENTERS, PASSAGE IN Z UP TO 500 MM



**EVOTECH**



**KREATOR ARES**

## SOLUTIONS FOR ADDITIVE MANUFACTURING

## MONOBLOC CNC MACHINING CENTERS FOR HORIZONTAL MILLING



**IKON**

## BEAM-SAWS

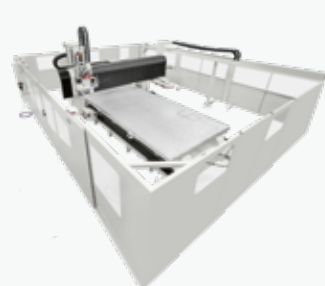


**HELIX**

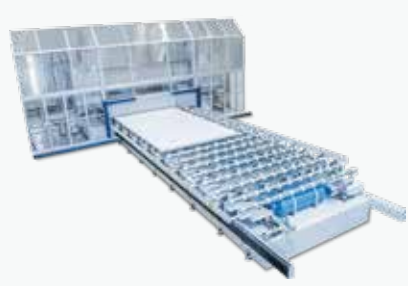
## FIXED AND MOBILE BRIDGE CNC MACHINING CENTERS



**FXB**



**MBB**



**AVANT CARAVAN**

## CNC MACHINING CENTER FOR THE EYEWEAR INDUSTRY



**MONOFAST EVO**

## WIND BLADE WORKING SYSTEMS



**EOS**

## CNC MACHINING CENTERS FOR GUNSTOCKS PROCESSING



**MULTILATHE**



**MONOFAST GUNSTOCKS**



**KARAT**

## WATERJET CUTTING SYSTEMS



**TECNOCUT PROLINE**



**TECNOCUT SMARTLINE**





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