

brembana maxima / brembana g-rex

5 axes CNC working centers



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 centres employing more than 4,000 workers and operating in all 5 continents. SCM Group: the most advanced skills and know-how in the fields of industrial machinery and components.

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



CMS Stone Technology realizes avant-garde solutions for the working of marble, natural stones and composite stones. Under the brand name Brembana Macchine, CMS Stone Technology was in the 80's the first manufacturer of a stone machining centre, thanks to an idea of its founder Mr Pietro Aceti. **CMS Stone Technology** has always been a reliable technological partner in designing unique solutions, for any need, in the world of building, architecture, interior and exterior decoration and wherever the use of stone and marble products is required.

brembana maxima / brembana g-rex

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APPLICATIONS



countertops | furniture | funerary art | sculpting | street furniture | building restoration



fireplaces | doors, stairs and threshold | architectural and dimensional stonework | facades



Better.

Effective.

Strong.

Tailored solutions.

The **BEST** performances in stone processing.

5 axes CNC working centers

BREMBANA MAXIMA

TECHNOLOGICAL BENEFITS

5/6 INTERPOLATED AXES MACHINING CENTER

Brembana maxima is a Numerically Controlled Machining Center with five/six interpolated axes suitable for processing both slabs and blocks even with high thickness in marble, granite, composite stone and ceramic.

It can perform each type of raw and polished contouring, as well as milling, drilling, countersinking, bas relief and writing. This machine can be customized to the customer's needs and is a state-of-the-art representation of 5-axis machining.



KEY BUYER BENEFITS

- + **Power at the top of the category:** The electrospindle is CMS technology, liquid-cooled and with power up to 30 kW, which guarantees ideal operating conditions and up to 21% savings on cycle times.
- + **Unrivalled mechanics:** The sturdy structure of the machining center ensures optimal absorption of the stresses derived from machining, guaranteeing a high constant precision over time. The machine base fixed directly to the ground, without the need of building work, increases the stability and performance.
- + **+43% stiffness on rotary axes:** Pneumatic brakes on B and C axes, guarantee maximum stiffness to get superior performance and quality.
- + **Quality without compromise:** Tool wear control system, which enables the automatic adjustment of the tool position, ensures top quality finishing.



Open frame version, to install on concrete or carpentry shoulders

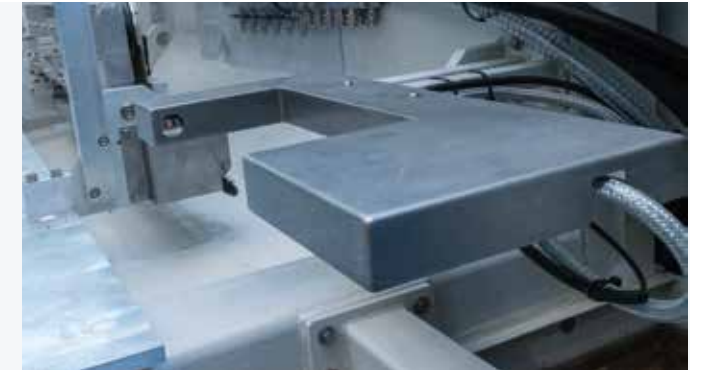
BREMBANA MAXIMA

ACCESSORIES

Blades cover up diam. 350 or 500 mm for torque multiplier for a cutting capacity up to 160 mm and station for automatic change.



Tool laser presetter for the automatic measuring of tools diameter and/or length; the use of this tool avoids manual setting operations and ensures a better control of tools' wear.



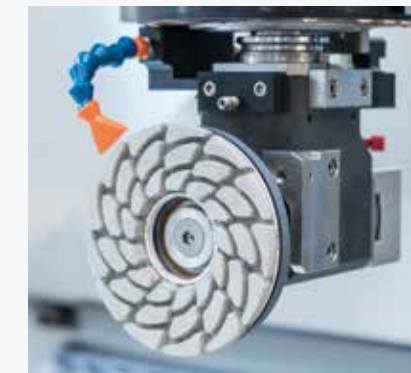
Tool kit for processing and polishing of drainers and sinks with 90° edges.



Front recycling tank for working water equipped with metal grate to guarantee to the operator an easy access to the working area.



Wide range of lathes to satisfy every needs: diam 700 mm – 700 kg / diam 1.200 mm – 5.000 kg / diam 1.500 mm – 10.000 kg



90° angular gear for cup wheels with magnetic attack.

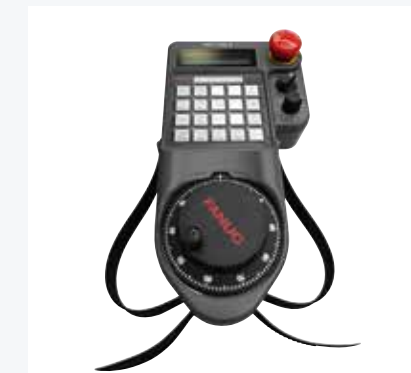


Workpiece thickness probe (available also in wireless modality).



Electrospindle cooling system through chiller unit.

Solid 30 kw electrospindle to ensure the needed power necessary to work big thickness blocks.



Numerical Control FANUC.



Laser projectors for cups positioning.



Control panel on mobile trolley.

BREMBANA G-REX

TECHNOLOGICAL BENEFITS

5/6 INTERPOLATED AXES MACHINING CENTER

Brembana g-rex is a Numerically Controlled Machining Center with five/six interpolated axes suitable for processing both slabs and blocks even with high thickness in marble, granite, composite stone, and ceramic. It can perform each type of raw and polished contouring, as well as milling, drilling, countersinking, bas relief, writing, and blade working. The machine can be customized to the customer's needs and it is especially designed for fabshops involved in architectural projects and the building industry in general.

KEY BUYER BENEFITS

- + **+43% stiffness on rotary axes:** Pneumatic brakes on B and C axes, guarantee maximum stiffness to achieve superior performance and quality.
- + **Quality without compromise:** Tool wear control system, which enables the automatic adjustment of the tool position, ensures top quality finishing.
- + **Maximum freedom for your projects:** Z-axis stroke up to 2000 mm for ultra-thick workpiece machining.
- + **The best solution for block machining:** Its extraordinary stability allows to install disks with a diameter up to 1.200 mm.



Z-axis up to 2.000 to work very high thickness pieces.

BREMBANA G-REX ACCESSORIES

Tool laser presetter for the automatic measuring of tools diameter and/or length; the use of this tool avoids manual setting operations and ensures a better control of tools' wear.



Digital camera fully equipped with protection box for automatic slab acquisition.



Diam 300 mm Frankfurt plates for natural stone surface treatment.

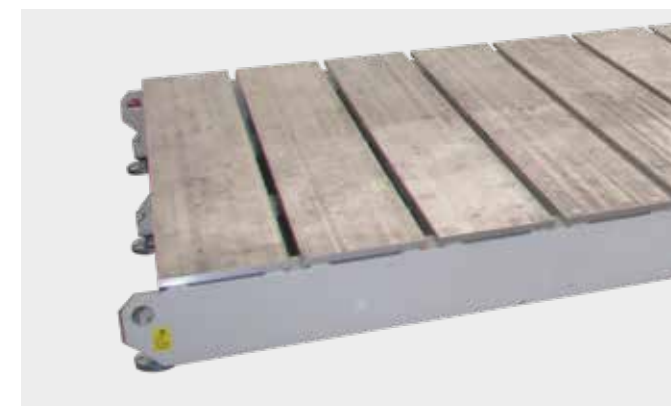


Vacuum manipulator with maximum loading up to 1.000 kg. It guarantees the movement of pieces with greater thickness.

Numerical Control FANUC.



Suction cups h 100 or 200 mm.



Wide range of tables available: fixed or tilting, with working plane in wood, rubber and aluminum.

BREMBANA G-REX

ACCESSORIES

Wide range of lathes to satisfy every need: diam 700 mm – 700 kg / diam 1.200 mm – 5.000 kg /diam 1.500 mm – 10.000 kg
Unità pulizia lastra e piano di lavoro Slab and work table cleaning unit Misuratore.



Slab and work table cleaning unit.

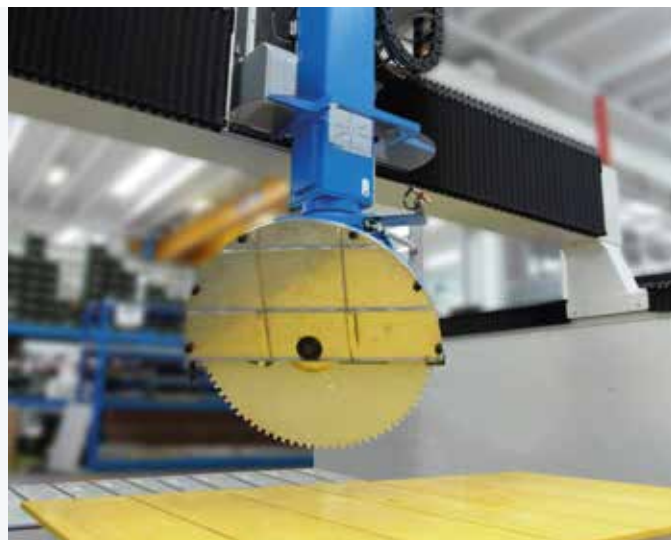


Steel supports.



5-axis head with a study fork able to support a powerful electrospindle with ISO 50 attack and power up to 23 kW.

Blade up to diam 1.200 mm with automatic tool changer.



Blade diameter presetter.



BREMBANA MAXIMA / G-REX SOFTWARE

EASYSTONE PREMIUM

EasySTONE Premium is a CAD/CAM software package, especially adapted to CMS Stone Technology machining centers and dedicated to the stone industry; it enables 360° management of all 5-axis machining related aspects.

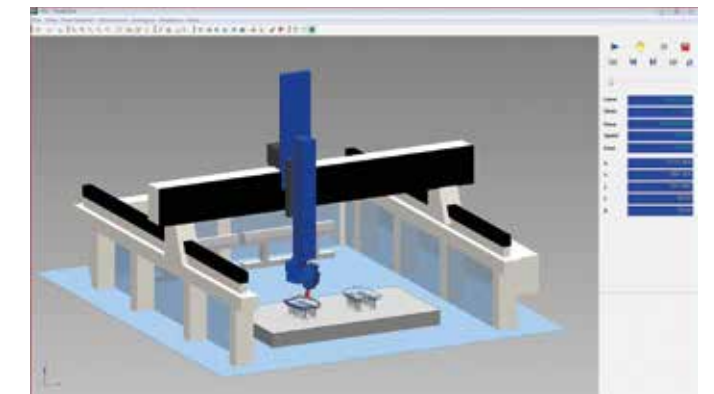
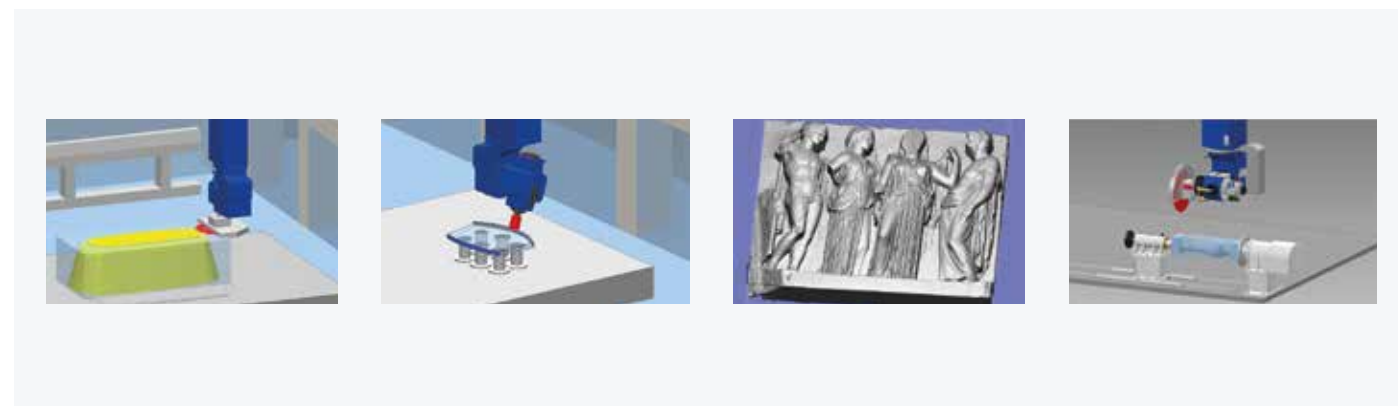
The software carries out the following functions:

- Design and definition of three-dimensional space-oriented surfaces, countertops, ultra-thick sinks, shower trays; shaping and smoothing of custom profiles, inscriptions for the funerary art and decoration and disk cutting
- Management of tool table and automatic or manual tool change magazine
- Shaping and polishing of three-dimensional convex/concave sections
- Calculation of machining times and costs
- Polished beveling with variable angle and width
- Three-dimensional graphic simulation of the machining process

The basic operating performance of Easystone Premium can be integrated by the following functions:

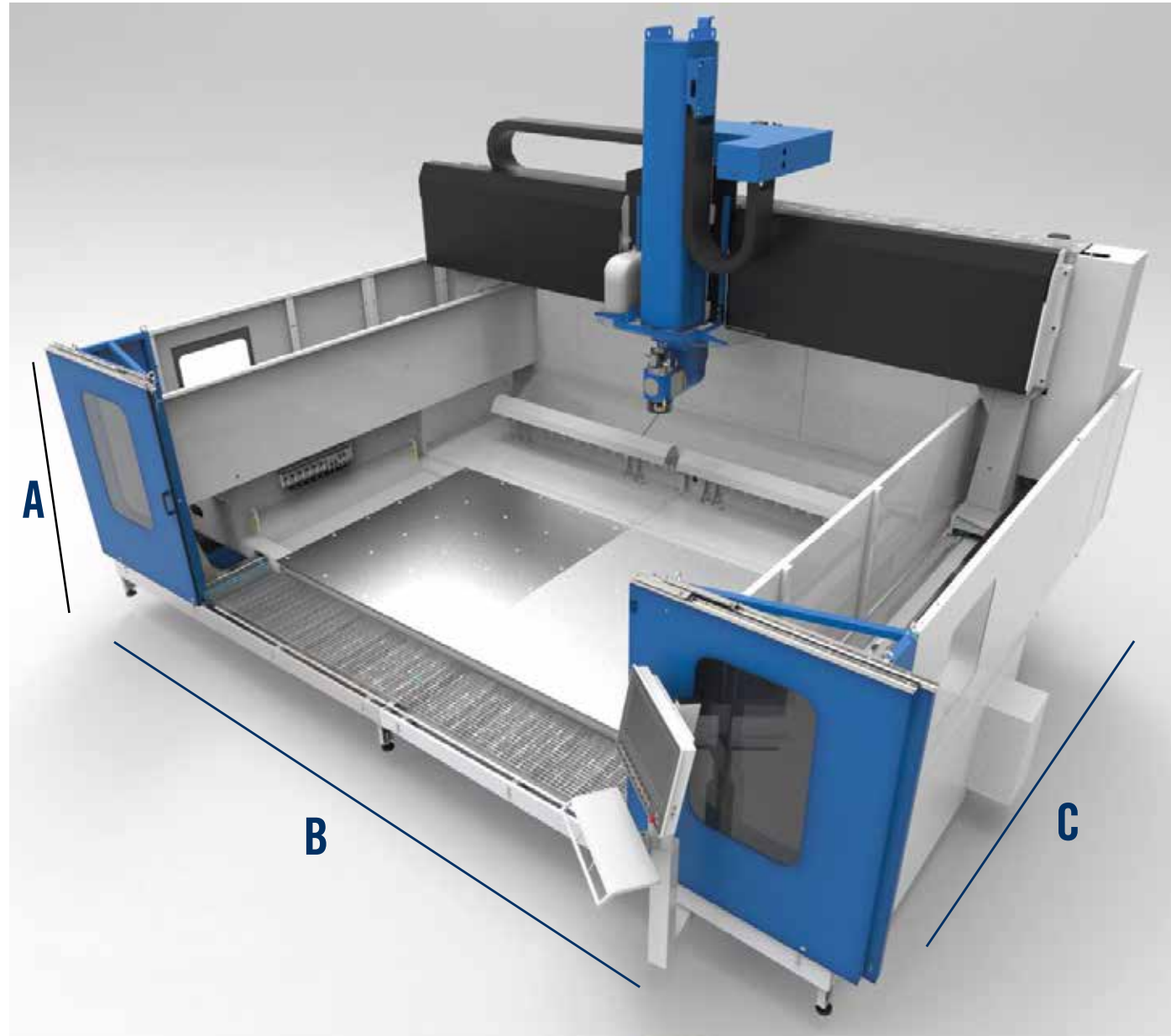
- Lathe machining management: milling of stationary or continuously rotating workpieces and interpolated milling of rotating workpieces
- Management of the machine as a “bridge saw” by means of joystick and CMS-SAW software interface; manual template copying with TEACH-IN key from remote keyboards
- Camera management for slab image acquisition
- Collision check during graphic simulation
- Dynamic cutting management, with automatic adjustment of disk feed speed based on electrospindle load
- Internet messaging for remote interfacing with the machining center

It is also possible to import complex copied/ designed surfaces by means of external devices and CAD programs, or to acquire via laser copiers complex surfaces like bas-reliefs or sculptures, both clamped to the bench and turned by the lathe.



BREMBANA MAXIMA

DIMENSIONS & TECHNICAL DATA



WORKING PLANES				
TYPE OF WORKBENCH	FIXED ALUMINIUM WITH / WITHOUT SLOTS	TILTING ALUMINIUM WITH SLOTS	REMOVABLE WORKBENCH	FIXED / TILTING WITH RUBBER WORKTOP
DIMENSIONS	3600 x 2000 mm	3600 x 2000 mm	3600 x 2000 mm	3600 x 2000 mm 4200 x 2000 mm

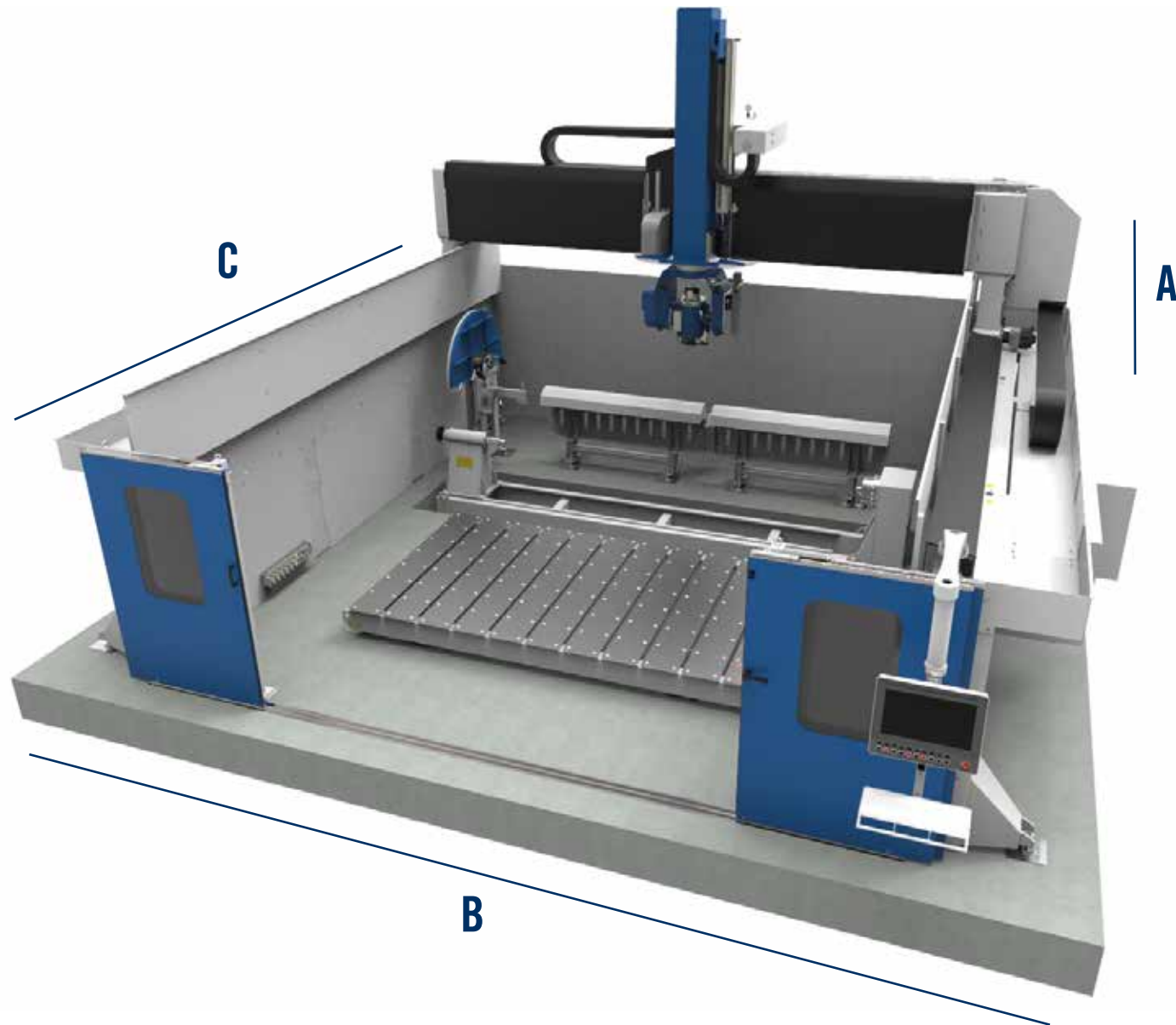
LATHES			
DIAMETER	700 mm	1200 mm	1500 mm
WEIGHT	700 kg	5000 kg	10000 kg
MAX MACHINABLE LENGHT	2500 mm	3900 mm	3800 mm

BREMBANA MAXIMA	MONOBLOCK			OPEN FRAME			
Z AXES STROKE							
Z AXES STROKE	460 mm	900 mm		900 mm	1400 mm	2000 mm	
A	2950 mm	4050 mm		3770 mm	4850 mm	6130 mm	
X AXES STROKE							
X AXES STROKE	3800 mm			3800 mm	4250 mm		
B	6320 mm			6560 mm	7700mm		
Y AXES STROKE							
Y AXES STROKE	2400 mm	3050 mm	4400 mm	3000 mm	4350 mm	5000 mm	... 18500 mm
C	4320 mm	5100 mm	6310 mm	5360 mm	6710 mm	7360 mm	22590 mm

BREMBANA MAXIMA: TECHNICAL DATA			
ROTATING AXES	B	±100°	
	C	±270° (540°)	
N. STATIONS TOOL CHANGER	26÷180 + 1 for blade ø 500 mm		
ELECTROSPINDLE	Power	13,5 KW	30 KW
	Revolution	0÷15000 rpm	0÷12000 rpm
	Connection	ISO 40	ISO 40
	Torque	22 Nm a 6000 rpm	39 Nm a 6000 rpm
ELECTRICAL CABINET	Monoblock	Integrated in the frame	
	Open Frame	Fixed on right shoulder	

BREMBANA G-REX

DIMENSIONS & TECHNICAL DATA



WORKING PLANES				
TYPE OF WORKBENCH	FIXED ALUMINIUM WITH / WITHOUT SLOTS	TILTING ALUMINIUM WITH SLOTS	REMOVABLE WORKBENCH	FIXED / TILTING WITH RUBBER WORKTOP
DIMENSIONS	3600 x 2000 mm	3600 x 2000 mm	3600 x 2000 mm	3600 x 2000 mm 4200 x 2000 mm

LATHES			
DIAMETER	700 mm	1200 mm	1500 mm
WEIGHT	700 kg	5000 kg	10000 kg
MAX MACHINABLE LENGHT	2500 mm	3900 mm	3800 mm

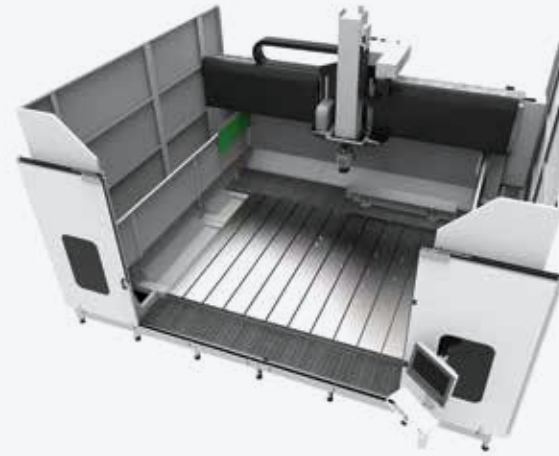
BREMBANA G-REX	OPEN FRAME					
Z AXES STROKE						
Z AXES STROKE	900 mm	1400 mm	2000 mm			
A	4050 mm	4930 mm	6190 mm			
X AXES STROKE						
X AXES STROKE	3800 mm	4250 mm				
B	6560 mm	7700 mm				
Y AXES STROKE						
Y AXES STROKE	3000 mm	4350 mm	5000 mm	7000 mm	...	18500 mm
C	5360 mm	6710 mm	7360 mm	9360 mm		22590 mm

BREMBANA G-REX TECHNICAL DATA			
ROTATING AXES	B	±100°	
	C	±270° (540°)	
N. STATIONS TOOL CHANGER	11 ÷ ∞ (multiple of 11) + blade holders		
MAX BLADE DIAMETER	1200mm		
ELECTROSPINDLE	Power	13 KW	23 KW
	Revolution	0÷8000 rpm	0÷8000 rpm
	Connection	ISO 50	ISO 50
	Torque	120 Nm a 1000 rpm	220 Nm a 1000 rpm
ELECTRICAL CABINET	Open Frame	Fixed on right shoulder	

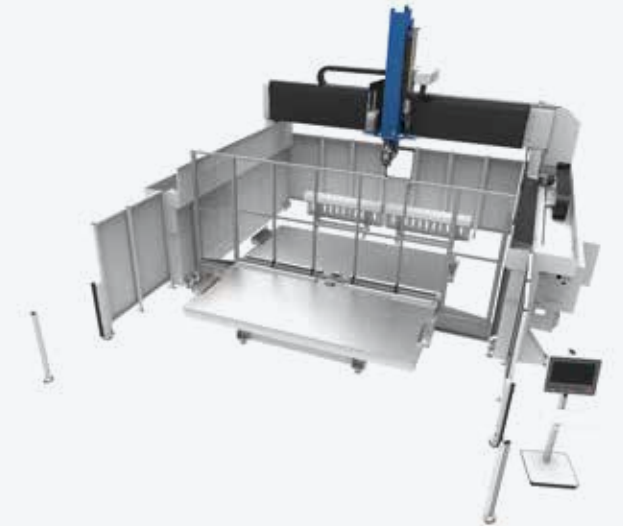
BREMBANA MAXIMA / G-REX

SPECIAL SOLUTIONS

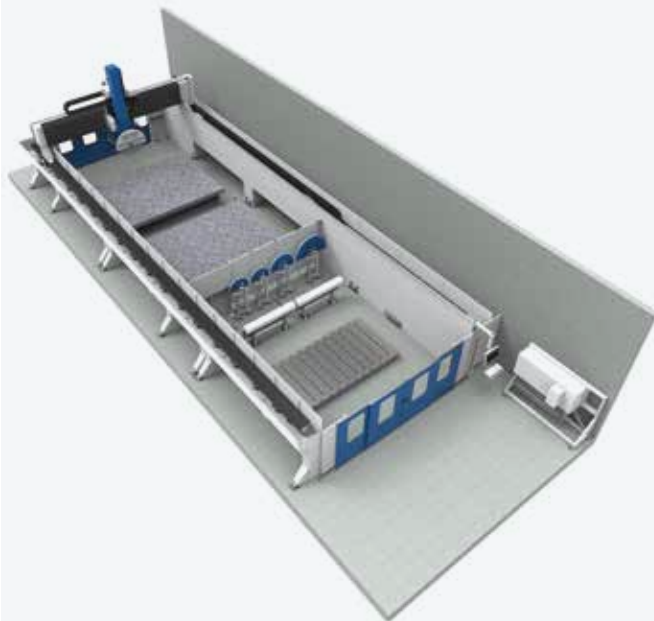
Electrospindle with hsk attach and customized covers to meet all the customers' needs.



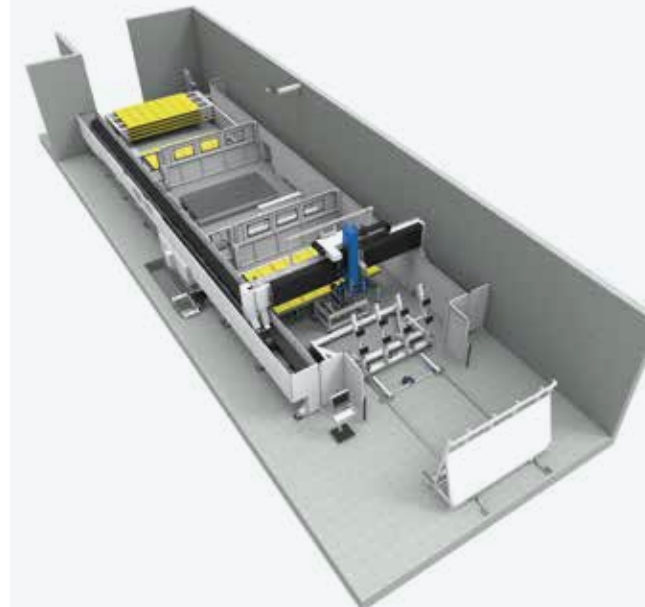
Rotating table: it eases loading and unloading operations. This is the ideal machine for a customer that is looking for high productivity.



Solution to work in pendular cycle: the front area works as a cnc center and the back area works as a bridge saw, with automatic stations for tools and disks change.



Solution for an integrated line to work slabs equipped as follows: automatic loading, cutting area, contouring area and storage



CMS connect the IoT platform perfectly integrated with the latest-generation CMS machines

CMS Connect is able to offer customised micro services through the use of IoT Apps that support the daily activities of industry operators - improving the availability and use of machines or systems. The platform displays, analyses and monitors all data from connected machines. The data collected by the machines in real time become useful information increase machine productivity, reduce operating and maintenance costs and cut energy costs.



CMS active a revolutionary interaction with your CMS machine

Cms active is our new interface. The same operator can easily control different machines as the “CMS Active interfaces maintain the same look&feel, icons and iteration approach.



APPLICATIONS

SMART MACHINE: Section designed for the continuous monitoring of machine operation, with information on:

Status: machine status overviews. The representations provided allow machine availability to be checked - to identify possible bottlenecks in the production flow;

Monitoring: instantaneous, live display of the operation of the machine and its components, of currently running programs and potentiometers;

Production: list of machine programs run within a given timeframe with best time and average running time;

Alarms: active and historical warnings.

SMART MAINTENANCE

This section provides a first approach to predictive maintenance by sending notifications when machine components indicate a potentially critical state associated with reaching a certain threshold. In this way, it is possible to take action and schedule maintenance services, without any down-time.

SMART MANAGEMENT

Section designed for KPI presentation for all the machines connected to the platform. The indicators provided assess of the availability, productivity and. The indicators provided assess of the availability,

productivity and efficiency of the machine and the quality of the product.

MAXIMISED SECURITY

CMS Connect uses the standard OPC-UA communication protocol, which guarantees the encryption of data at Edge interface level. CMS Connect's Cloud and DataLake levels meet all state-of-the-art cyber-security requirements. Customer data are encrypted and authenticated to ensure total protection of sensitive information.

ADVANTAGES

- ✓ Optimisation of production performance
- ✓ Diagnostics to support components warranty optimisation
- ✓ Productivity increase and downtime reduction
- ✓ Improvement of quality control
- ✓ Maintenance costs down

EASY OF USE

The new interface has been especially developed and optimized to be immediately used via touch screen. Graphics and icons have been redesigned for user-friendly and comfortable navigation.

ADVANCED ORGANIZATION OF PRODUCTION

Cms Active enables configuring different users with different roles and responsibilities according to the operation mode of the machining centre (e.g.: operator, maintenance man, administrator, ...).

It is also possible to define the work shifts on the machining centre and then survey activities, productivity and events that have occurred in each shift.

ABSOLUTE QUALITY OF THE FINISHED WORKPIECE

With CMS aActive the quality of the finished workpiece is no longer jeopardized by worn-out tools. The new Tool Life Determination system of CMS Active sends warning messages when the tool life is running out and recommends its replacement at the most appropriate time.

TOOL SET-UP? NO PROBLEM!

CMS Active guides the operator during the tool magazine set-up phase, also allowing for the programs to be run.

THE RANGE OF CMS STONE TECHNOLOGY

FOR STONE PROCESSING

CNC MACHINING CENTERS



BREMBANA SPEED



BREMBANA SPEED TR

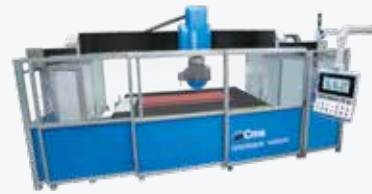


BREMBANA MAXIMA



BREMBANA G-REX

5 AXES BRIDGE SAWS AND 5 AXES SAW JET MACHINES



BREMBANA VENKON



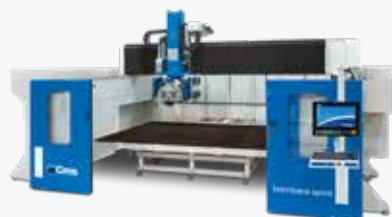
BREMBANA KOSMOS



BREMBANA IMPACT



BREMBANA FORMAX



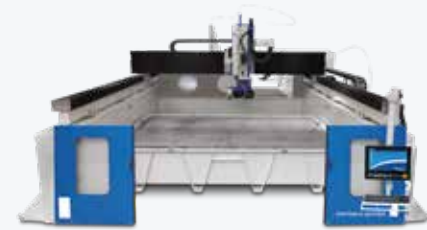
BREMBANA SPRINT



BREMBANA GIXA

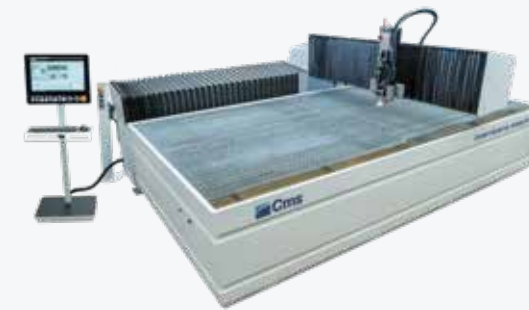


BREMBANA KOSMOS JET



BREMBANA FORMAX JET / SPRINT JET

WATERJET CUTTING SYSTEMS AND PRESSURE INTENSIFIERS



BREMBANA EASYLINE



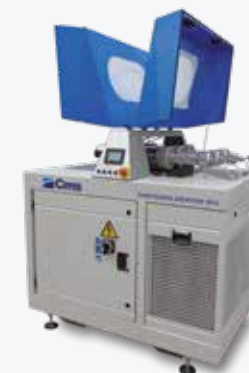
BREMBANA MILESTONE S



BREMBANA PROLINE



BREMBANA AQUATEC



BREMBANA JET POWER EVO



BREMBANA GREENJET EVO



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