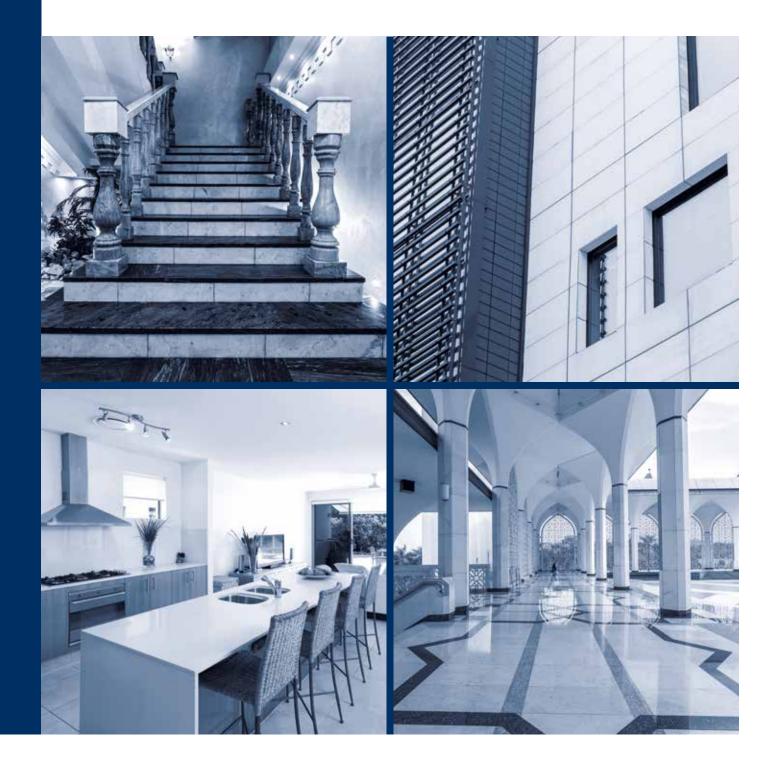


# brembana kosmos

5 axes bridge saw





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.

## SCM 2 group a team of excellence





# brembana kosmos

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a company of scm@group

## **APPLICATIONS**



furniture | countertops | inlays and mosaics | doorsteps | staircases and thresholds



funerary art | street furniture | architectural and dimensional stonework

Strong. Modern. Adaptable. Reliable. **Technological solutions.** 

**SMART** machines for you production needs.

5 axes bridge saw



## **BREMBANA KOSMOS TECHNOLOGICAL BENEFITS**

#### **5-AXIS CNC MONOLITHIC BRIDGE SAW**

It's the new generation of a numerically controlled 5 axes Bridge Saws.

Extremely compact and easy to install; it doesn't require any foundations, even easing a possibile re-installation. The machine is built with the needs of workshops in mind and it is used for cutting slabs up to 200 mm in thickness (with blade Ø 625 mm) of natural stone, synthetic stone, and ceramic.

The weight of the machine, up to 5.1 tons, ensure perfect rigidity for the production of:

- kitchen countertops
- vanity tops
- wall panels for interiors and exteriors
- flooring
- doorsteps, staircases and thresholds
- street furniture

### **KEY BUYER BENEFITS**

- stability and performance.
- ensuring reliability and durability even when machining very hard materials.
- waste.
- the machine.



**Unrivalled mechanics**: The weight of the machine up to 5.100 kg ensures the optimal absorption of 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

**Category-leading power:** the powerful spindle is capable of delivering up to 18.6 kW of power,

**Maximum freedom for your projects**: Rotary axes are fully interpolated with linear axes: the machine can therefore perform 5-axis machining with a tool and/or disc if necessary.

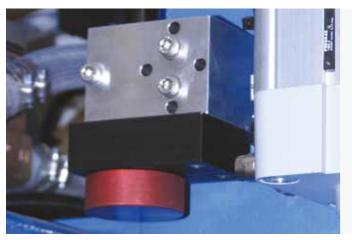
+33% productivity without manual movements: Thanks to the vacuum manipulator, it is possible to automatically move the cut pieces to optimize the cutting of the slab and reduce processing

**Easy programming:** Simple and intuitive programming, thanks to the software installed on-board

## **STANDARD ACCESSORIES**

TILTING BENCH operated by two hydraulic cylinders, with movements controlled by an inverter to ensure smooth motion. Maximum tilting load: 800 kg Maximum static load: 2000 kg Dimensions: 3,600 mm x 2,000 mm





CROSS LASER used to define in a fast and easy way the piece origin or to obtain a two-dimensional templates to be used for other processings

POWERFUL ELECTROSPINDLE with up to 18.6 kW of power managed by an inverter, it allows the rpm regulation from 0 up to 5.000. It can be used with diamond tools as finger bits or core drills. The tools changer is manual



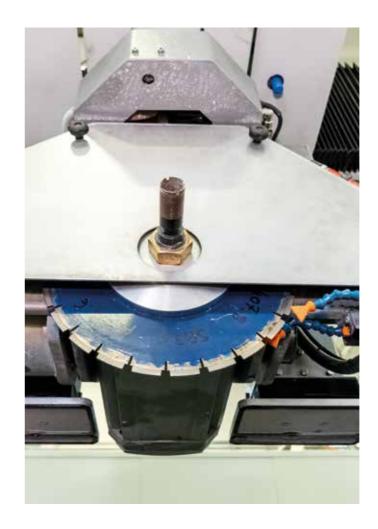


ADDITIONAL RUBBER TABLE to jet overall workbench 3.600 mm x 2.000 mm

VACUUM MANIPULATOR cit allows cut pieces relocation up to a maximum weight of 300 kg. This permits to minimize the working scraps without stopping the machine, increasing its productivity. It can be used with a disk up to 625 mm

#### ADVANTAGES:

- Easy to use, also by operators without experience
- Important cycle time reduction
- automatic operation
- The very functioning design guarantees maintenance reduction
- Manual use available, to help the operator during loading







PC PANEL with touch screen controls and 21" screen

## **OPTIONAL**



DISK PRESETTING to measure disk diameter and finger bits or core drills lenght



SLAB THICKNESS PROBE for the automatic measuring of the piece thickness



DISCK AUTOMATIC RESTART STATION it can be activated by a specific function on the operator panel



CAMERA: system to obtain the images from the working table, it permits to accellerate the pieces positioning and notice possible bugs on the slab

## BREMBANA KOSMOS Software

#### SOFTWARE: CMS ACTIVE SAW

The software has been entirely developed by CMS in order to manage all the typical processes of the industry in the most efficient way

- Linear (vertical or inclined) and parametric cuts
- Drilling and profiling
- Kitchen countertops production with internal edge managment with finger bits or core drills.
- Import of DXF files created with external CAD
- Manual drawing throught native CAD
- Manual nesting
- 3D profiling, linear or curved
- 3D simulation
- Brushing by backing pad with Frankfurt inserts
- Engraving / Writing (optional)

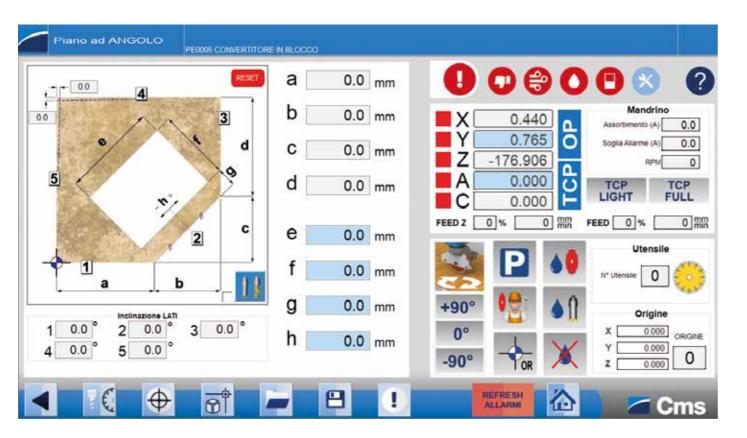
The machine can be managed either manually or automatically, using the parametric programs offered by the software and the laser projector supplied as standard with the machine.

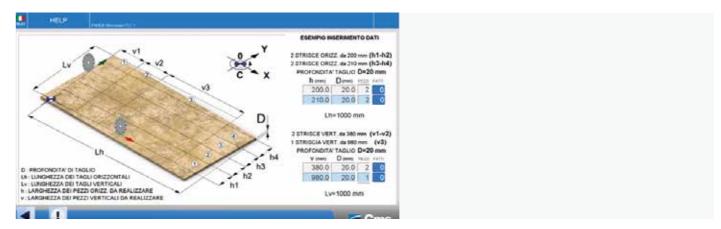
The machine can be combined with an automatic system for the slab image acquisition, to allow pieces nesting directly on the slab.

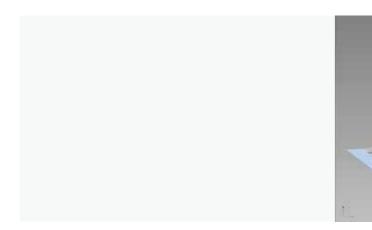
The presence of the manipulator allows the software to optimize the cuts sequence to minimize the working scraps and the operator intervention.

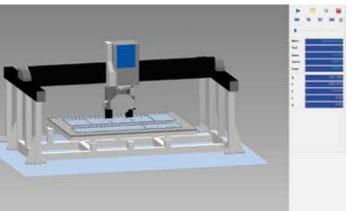




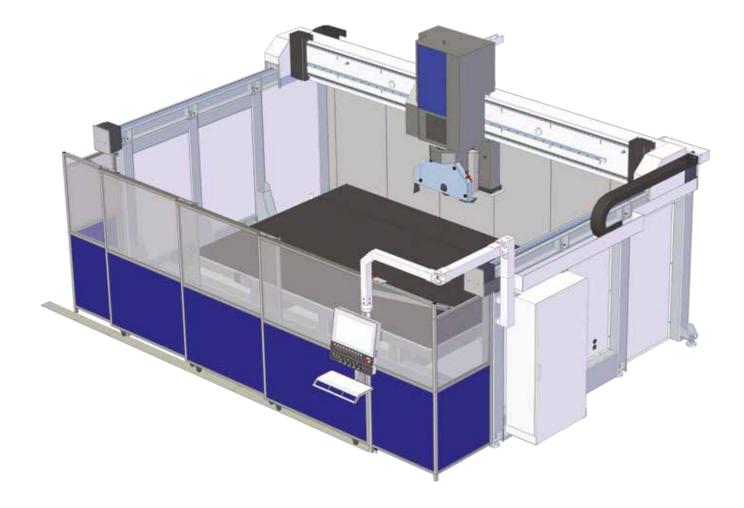








## **BREMBANA KOSMOS** DIMENSIONS AND TECHNICAL DATA



## BREMBANA KOSMOS: TECHNICAL DATA

DISK DIAMETER MAXIMUM WORKING THICKNESS (WITH DISK) ELECTROSPINDLE ELECTROSPINDLE REVOLUTION HEAD REVOLUTION (C AXIS) HEAD INCLINATION (A AXIS) X AXIS STROKE Y AXIS STROKE Z AXIS STROKE Z AXIS STROKE WORKBENCH DIMENSIONS MINIMUM SPACE REQUIRED FOR INSTALLATION OVERALL MACHINE WEIGHT

\*excluding space necessary for electrical cabinet access

350 ÷ 625 mm / 14÷25 in
200 mm / 8 in
18,6 kW
0÷5000 rpm
± 180° (360°)
0° - 90°
3960 mm / 156 in - 30 m/min
2450 mm / 96 in - 25 m/min
400 mm / 16 in - 7.5 m/min
3600x2500 mm / 142x in
6495*x4205x3080 mm
Up to 11200 lb

# **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.

## 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 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-theart 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

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# THE RANGE OF CMS STONE TECHNOLOGY











**BREMBANA GREENJET EVO** 



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