

contour



Structurally robust
for durable high
precision and
reliability

5-axis NC machining centre. Thanks to its 700/1200 mm vertical stroke, Breton Contour is ideal for architectural applications, funerary art, and deep slotting, allowing execution of complex and diversified machining processes.

breton

EXCLUSIVE TECHNOLOGIES

Carefully engineered structural components combined with the latest Siemens electronics and motors and a powerful spindle that can reach 22,5 kW (S6), make Contour extremely high-performing on a wide range of materials.

Marble



Granite



Engineered Stone

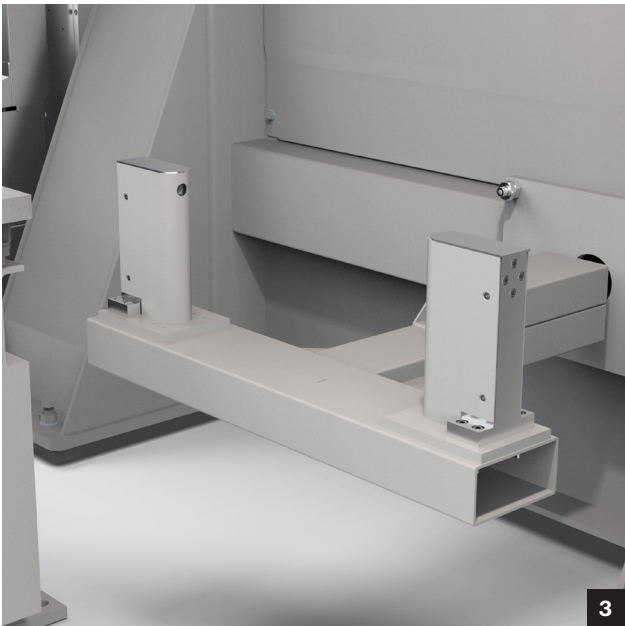
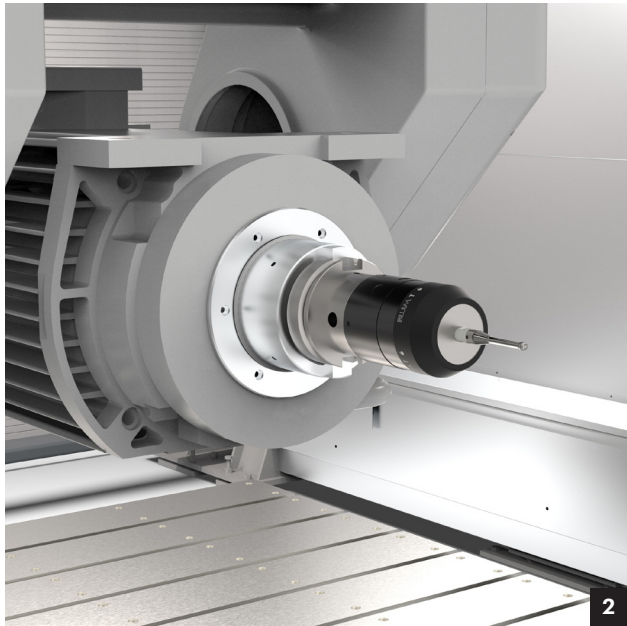
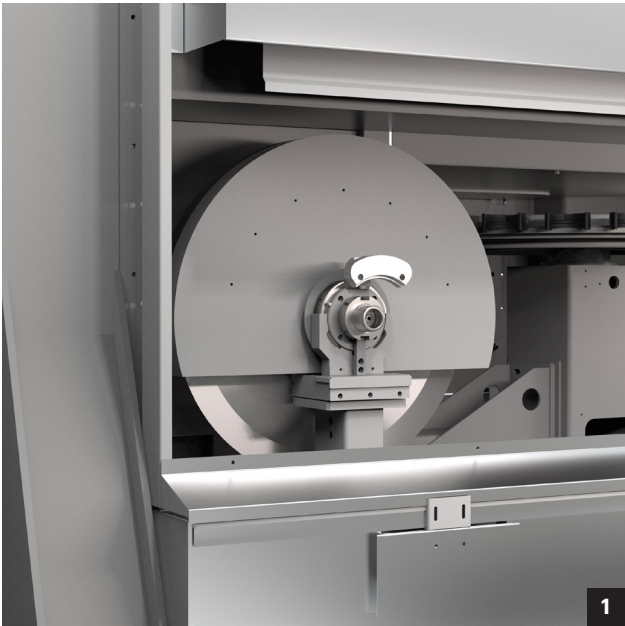


Ceramic



- 1.** Disc head with HSK-B80/ HSK-B100 tool holder, complete with automatic opening tool store mounted on the machine column. Allows roughing cuts of the workpiece on a single machining centre
- 2.** Wireless RF touch probe to detect the workpiece position in the work area. This allows the utmost positioning and clamping flexibility
- 3.** Laser probe to check tool profile, diameter and length, complete with software
- 4.** Facility to configure the machine with the 900 mm or 1600 mm diameter lathe to produce even the most complex geometries.

Scan the QR code to discover more



Breton Contour

Matrix is a machining centre that combines the **robustness** and **thrust** required for roughing operations with the dynamics and precision needed for finishing. A stable and robust base that is also extremely dynamic, configurable with a broad range of components and accessories in order to handle entire machining processes in a large number of sectors.

Breton Contour is acclaimed for its **reliability and precision**, two aspects long associated with this model and that place it at the summit of the stoneworking industry in 5-axis machining work.

Breton Contour can be used from **contouring** up to the creation of **complex large size 3D statuary**.

For more demanding clients the machine can be equipped with 3D scanners to read the shapes to be subsequently reproduced.



5 reasons to choose Contour

1 / Structurally robust for durable high precision

Painstakingly designed structural components, analysed with FEM tools and assembled in Breton's plants, together with the latest generation of Siemens motors and electronics place this cutting centre at the **top reliability** level in its class.

Axis movements are provided by **helical tooth racks** which, compared to spur tooth racks, have higher load capacity, are more durable, emit less running noise and, in particular, guarantee absolute positioning **accuracy**.

The bridge has a gantry system, meaning two opposing motors that increase precision by eliminating the transmission axis and thus also eliminating the risk of torsional bending.

The high precision **linear guides** with optimally positioned runner pads impart stability and accuracy also during the most demanding work processes.

2 / Superior class motor spindle

Contour offers a choice of **2 spindle versions** as part of the basic equipment:

the **standard version**, with its 20 kW power output in S6 in order to exploit the high available speed (14.500 rpm) for contouring and shaping operations with tools of the latest generation. The machine is equipped with an electro-fridge for spindle cooling to ensure both durability and performance maintenance.

The **HD version** reaches 22,5 kW power in S6 and can generate the high torque needed for slotting or roughing operations that call for high removal rates. Breton motor spindles are thermally stabilised and feature long life grease lubrication of the bearings. All have through-cut coolant supply inside the hollow shaft.

3 / All the tools required to finish the workpiece on the machine

Breton Contour can be equipped with a **wide range of tools** that allow you to start from the block to the complete job.

This is mainly due to the linear and/or translating magazine and the cutting heads with automatic changeover.

Another key component is the lathe for machining statues and columns with complex geometries.

Finally, Breton Contour can also be configured in a

'milling' version.

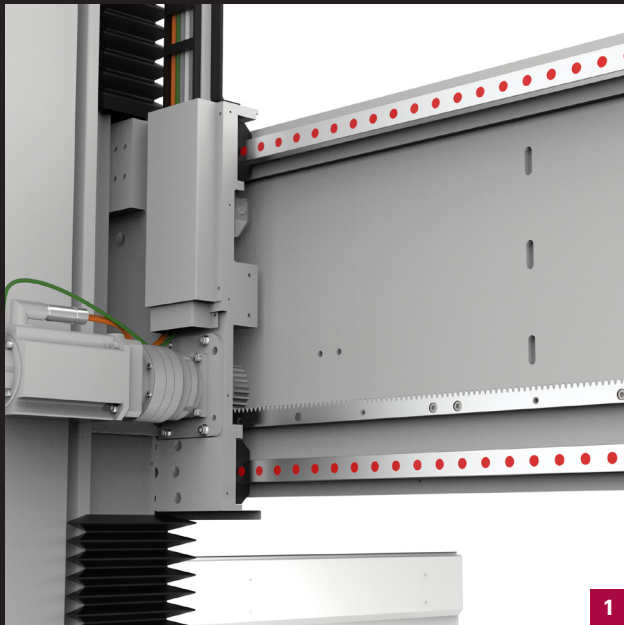
4 / Perfect for both wet and dry machining operations

The machine is designed to be configurable and suitable for both **wet** (with coolant) and **dry** machining processes.

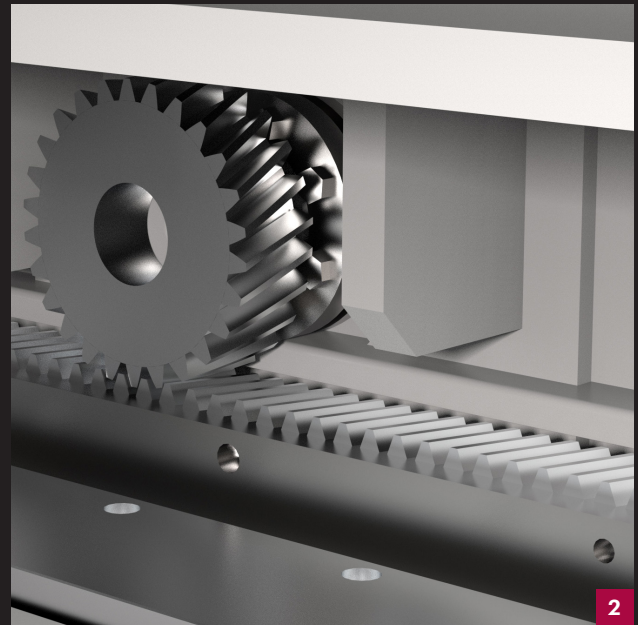
In case of dry machining, the machine can be configured with motorised bellows to close the top of the work area and all the associated auxiliary dust capture and removal systems (optional).

5 / Breton reliability and assistance

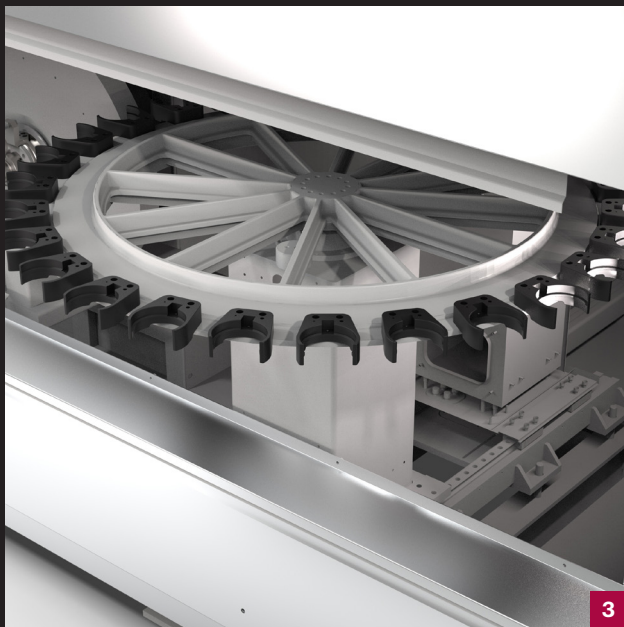
Service is an essential aspect. **Speed** of response, technical **expertise**, **punctuality** of service and fast shipping of spare parts are hallmarks of the Breton brand. This level of service, combined with informed technical choices, such as the insistence on high-end components and the **Teleservice** system, mean Contour delivers the very highest availability rates.



1



2



3



4

1.
Bridge with gantry system
for rapid movements and
precise positioning

2.
Helical tooth racks for higher
thrust force

3.
Circular 27-cell travelling
tool store

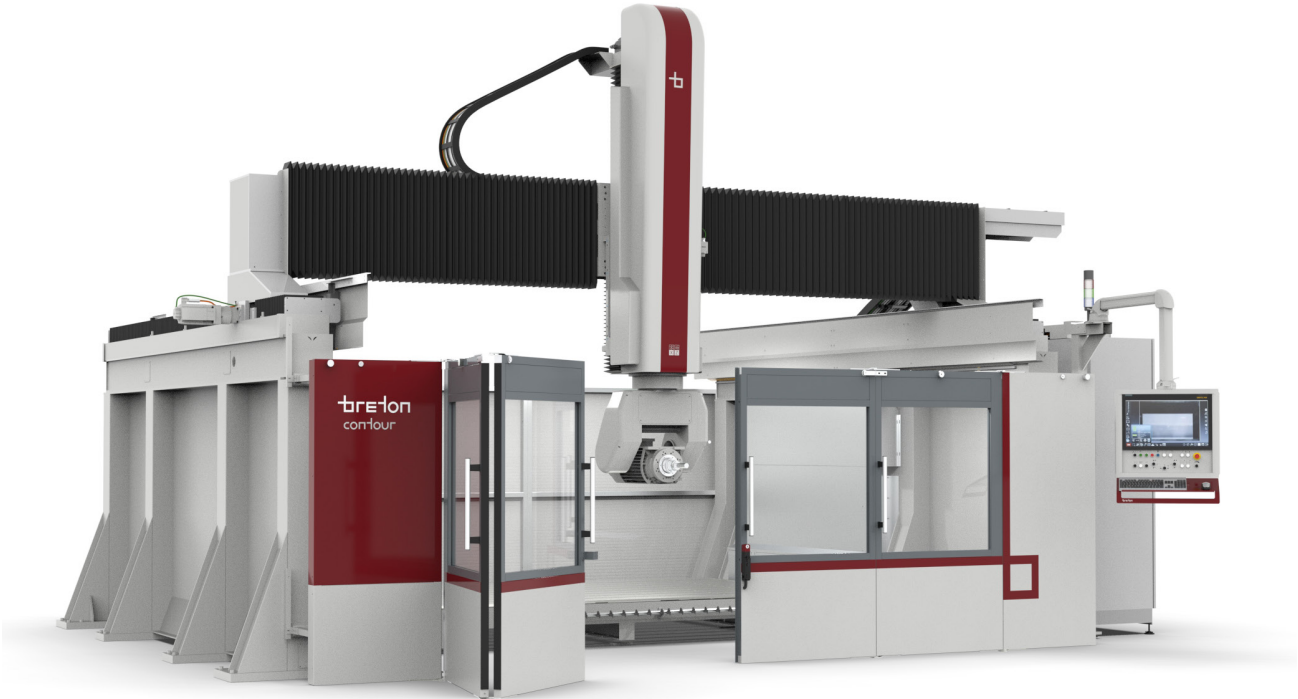
4.
Arc-welded steel bench with
aluminium slats

Technical information

	CONTOUR NC700	CONTOUR NC700 HD
"Z" axis travel (with "A" axis at 0°)	700 mm	700 mm
Spindle motor power (in S1 duty)	16 kW	18 kW
Max. spindle rotation speed	14500 rpm	7500 rpm
Tool holder	HSK-B80	HSK-B80
"X" axis travel	3700 mm	3600 mm
"Y" axis travel	2800 mm	2800 mm
"X" axis max. displacement speed	40000 mm/min	40000 mm/min
"Y" axis max. displacement speed	40000 mm/min	40000 mm/min
"Z" axis max. displacement speed	30000 mm/min	30000 mm/min
"A" axis rotation	0 - 115 °	0 - 110 °
"C" axis rotation	200 °	200 °



	CONTOUR NC1200	CONTOUR NC1200 HD	CONTOUR NC1200 SHD
"Z" axis travel (with "A" axis at 0°)	1200 mm	1200 mm	1200 mm
Spindle motor power (in S1 duty)	16 kW	18 kW	30 kW
Max. spindle rotation speed	14500 rpm	7500 rpm	10000 rpm
Tool holder	HSK-B80	HSK-B80	HSK-B100
"X" axis travel	3600 mm	3600 mm	3500 mm
"Y" axis travel	2800 mm	2800 mm	2800 mm
"X" axis max. displacement speed	40000 mm/min	40000 mm/min	40000 mm/min
"Y" axis max. displacement speed	40000 mm/min	40000 mm/min	40000 mm/min
"Z" axis max. displacement speed	10000 mm/min	10000 mm/min	10000 mm/min
"A" axis rotation	0 - 115 °	0 - 110 °	0 - 115 °
"C" axis rotation	400 °	400 °	400 °



Breton – a pioneering developer of advanced technologies and materials – is an international leader in the design and production of state-of-the-art industrial machinery and systems to create and transform natural stone, ceramics, metals and in the development of engineered stone plants.

Founded in 1963 by Marcello Toncelli, with headquarters in Treviso (Castello di Godego), two other production sites in Italy and seven foreign branches (USA, Australia, India, Germany, China, UK, Brazil), the company is recognized worldwide thanks to its philosophy always aimed at research.



The Breton Institute of Technology, expression of Breton's DNA and pioneering attitude, is the department where new technologies are explored and created. Several teams devoted to research design and develop new sustainable materials and technologies for different industrial sectors.