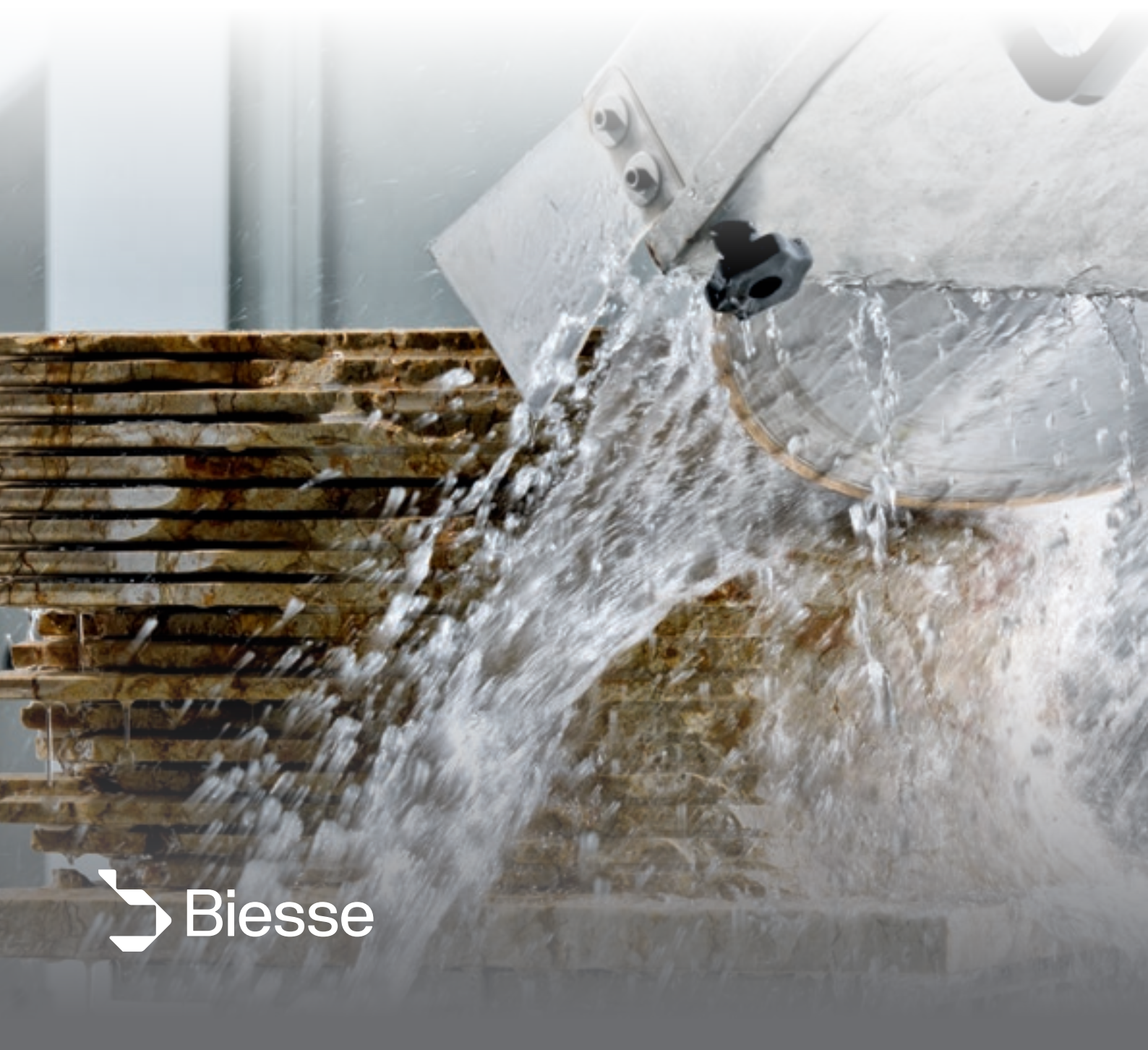


MA STER 850

UNIVERSAL CNC MACHINING
CENTRE FOR STONE



 Biesse

THE PERFECT COMBINATION OF POWER AND PRECISION



Master 850 represents the evolution of large machining centre for the machining of sheets, slabs and blocks of natural and composite stone. The uniqueness of this machine is that it can achieve a very high quality finish not just on sheets but on slabs and blocks as well. It's the ideal "all in one" solution for marble processing applied to construction, monumental, funerary and architectural projects.



MASTER 850

- EXTREME POWER AND MAXIMUM PRECISION FINISHING
- STURDY AND ROBUST WITH ELEVATED LOAD CAPACITY FOR BLOCKS OF GRANITE, MARBLE AND STONE
- ELEVATED PERFORMANCE THANKS TO CONTINUED MACHINING OPERATIONS WITH NO INTERRUPTIONS
- MAXIMUM MOVING SPEED TO REDUCE WAIT TIME

MAXIMUM PRECISION FINISHING FOR KITCHEN TOPS

Master 850 is the perfect synthesis of extreme power and precise, high-quality finish, an ideal solution that offers the utmost flexibility for machining sheets.



Flutes and recesses on kitchen tops, even with a tilted table.



Cup grinding of the external edge.

IDEAL FOR MACHINING SLABS AND CREATING KITCHEN TOPS

- Recesses
- Polished grinding
- Milling
- Cup grinding

CUP GRINDING POLISHING AND CREATION OF SQUARE HOLES



EASY AND RAPID SHAPING OF SLABS AND BLOCKS

The extreme ease and speed with which slabs and blocks are shaped - thanks to a powerful electrospindle that can drive a disc with a max diameter of 625 mm paired with extra long tools - guarantees a high quality finish even when brushing, milling and polishing shaped or convex profiles and surfaces facing different directions.



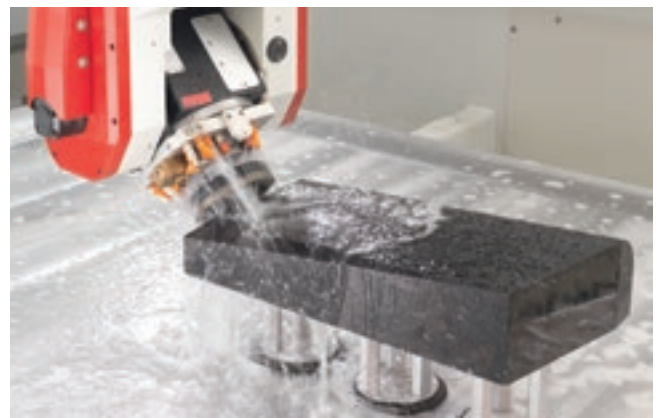
Grinding and polishing the edge of the slab.



5-axis finishing.



Polishing of rounded profiles on slabs.



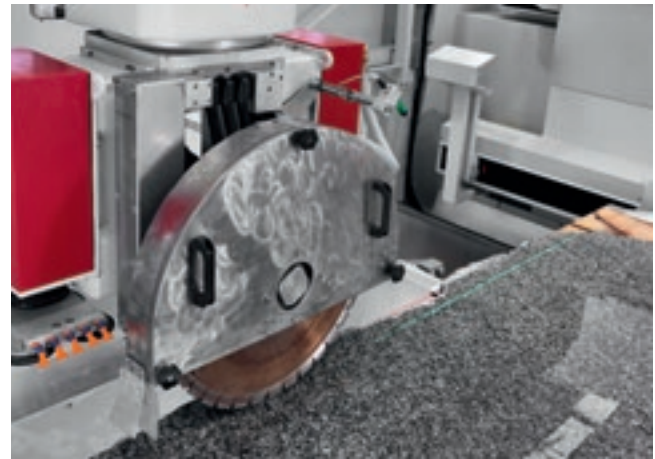
Bevel with variable angle.

**PERFECT FOR 5-AXIS MACHINING
ON SMALL SLABS FOR FUNERAL ART**

POWERFUL AND PRECISE FOR MACHINING BLOCKS AND TUBS



Disc cut at any angle.



The solid, hi-tech, 5-axis operating head is perfectly capable of handling more complex machining (e.g. fountains, monuments, tubs, railings and capitals) with disc-shaped milling cutters and can, at the same time, create kitchen tops and handle machining of sheets with the renowned quality of Intermac Machining Centres.

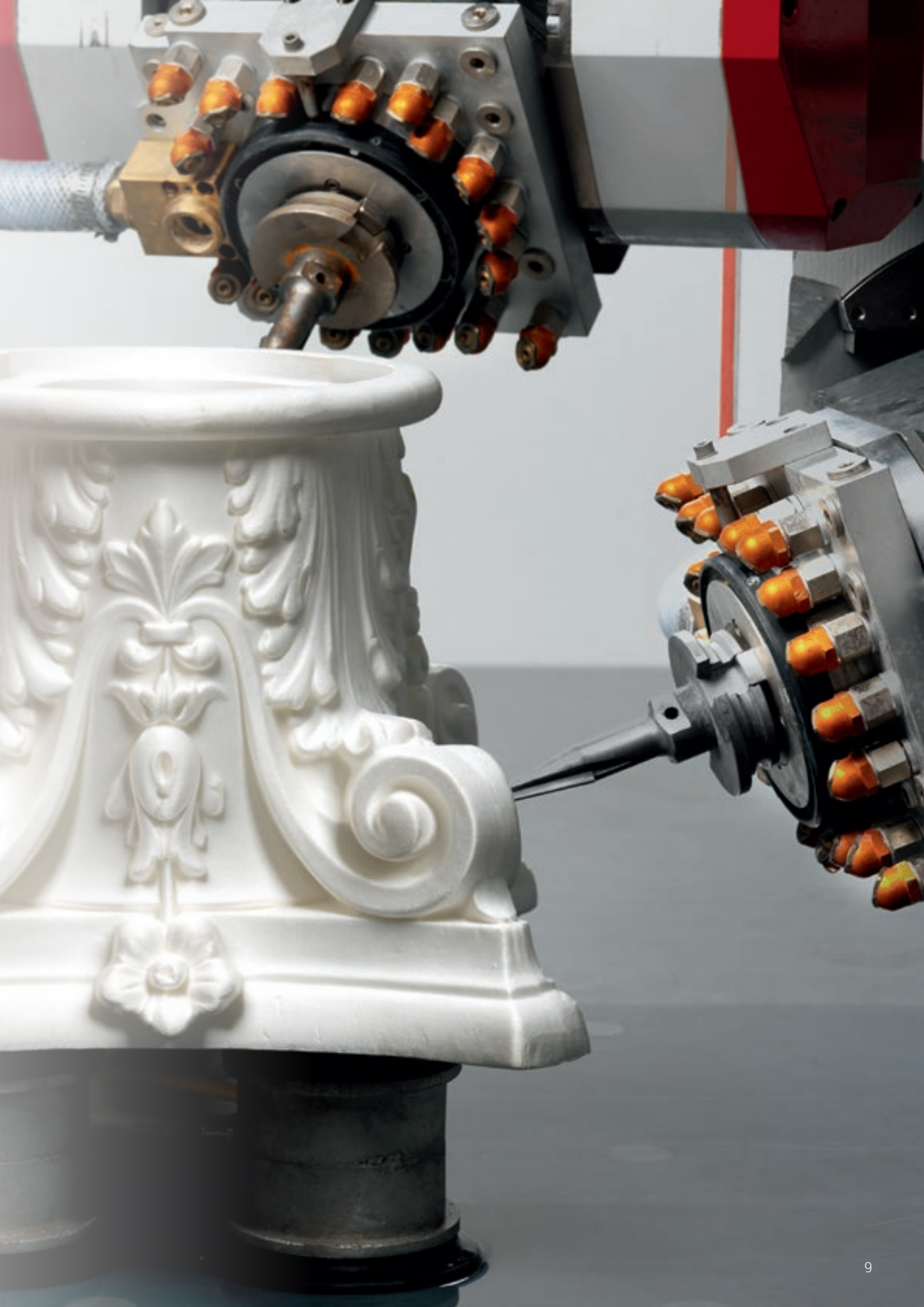
INNOVATION

5-AXIS TECHNOLOGY

High level technology for the best results and extremely easy to use.

The 5-axis head with endless rotation C axis and tilting A axis (from -90° to $+90^{\circ}$) ensures excellent flexibility and pushes the limit for the execution of complex machining operations.





STURDY AND ROBUST

Sturdy and extremely robust with elevated load capacity for blocks of granite, marble and stone.



Work table

Steel frame and solid refaced aluminium surface. Low surface to simplify loading with a forklift or jumper carriage. Special care for the comfort of the operator, who can access the surface from all sides and easily get to the tool magazine.



Fast and precise movement of axes

Movements are carried out using a heliocidal rack and double pinion to ensure precision and durability. An automatic device for automatic lubrication of the guides and of the rack guarantees the enduring reliability of all moving parts.

Maximum speed of movement up to 60 m/min with acceleration to minimise wait times.



Disc saw ideal for shaping blocks and for typical machining of slabs

Master 850 can be equipped with one or two discs with a diameter of 625 mm. The safe and completely automatic disc changing operation and the presence of the disc don't limit the working area in any way.

ELEVATED PERFORMANCE



Thanks to a completely automatic system, the extremely rapid and simple mechanical presetter allows for the precise and completely updated measurement of tools while machining, thereby avoiding any error by the operator.



Up to 59 tools

Several configurations are possible for the tool holder magazine, which can be expanded up to 59 positions, thereby ensuring that continuous machining operations can be programmed with no interruptions to load tools.



The cross-hairs laser guides the operator through the positioning of suction cups and stops, speeding up the preparation of the work surface.

ALL FUNCTIONS JUST A CLICK AWAY

EASYSTONE IS CAD/CAM SOFTWARE SPECIALISED FOR THE MACHINING OF MARBLE, GRANITE, STONE AND SYNTHETIC MATERIALS USING CNC MACHINING CENTRES. IT IS USED WIDELY IN THE SECTOR AND ALLOWS FOR THE EXECUTION OF THE MOST COMMON MACHINING OPERATIONS FOR STONE. THE SOFTWARE IS COMPATIBLE WITH PREVIOUSLY INSTALLED EASYSTONE PACKAGES AND ALLOWS FOR FLEXIBLE CONFIGURATION ON THE BASIS OF THE CUSTOMER'S NEEDS.

▸ **Simple and intuitive**

It can even be used by individuals who don't have specialised computer skills: all functions are "just a click away".

▸ **Complete**

Manages every aspect of CNC machining at 360°, guiding the operator from the design to the distribution of the pieces on the work table, to collision control with 3D simulations, to the optimisation of the machining operation workflow for the tools, to the generation of the machine programs.

▸ **Automated**

The pieces to be created can be designed rapidly thanks to a library of parametric components. The automatic CAM module can pair the machining operations with the pieces automatically.

▸ **Ideal for every type of machining operation**

Allows for the programming of all the typical machining operations used on stone: shaping and polishing edges, kitchen tops, bathroom unit tops, engraving, bas relief, shower trays, shaping and finishing solid pieces, polishing surfaces for 5-axis machining operations, using all types of tools.

EASY STONE

DESIGNED TO ALLOW THE EASY PROGRAMMING OF MACHINING OPERATIONS FOR STONE TO BE EXECUTED BY CNC MACHINING CENTRES, BRINGS OUT THE POTENTIAL OF THE MASTER RANGE.



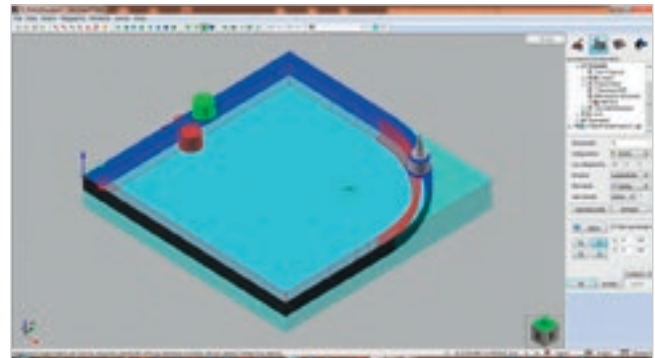
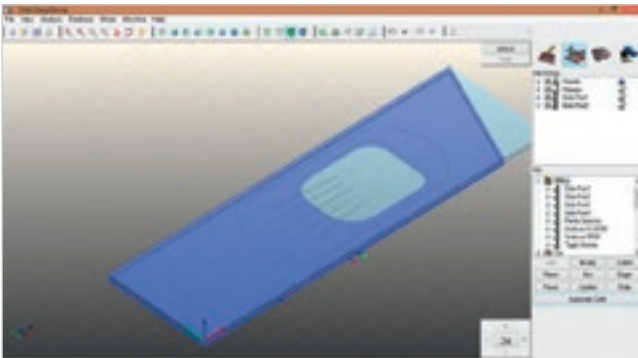
INTUITIVE AND IMMEDIATELY ACCESSIBLE INCLUDING BY LESS EXPERIENCED USERS

EASYSTONE MASTER - 3 AXIS

- ✔ Create and import 2D and 3D designs in the most widely used standard formats (.dxf, .stl, .iges).
- ✔ Program 2D machining operations for sheets: boring, milling, edgebanding, engraving, recessing, tracing.
- ✔ Program 3-axis machining operations for the emptying and finishing of solid pieces (shower trays, sinks, tubs, vases).
- ✔ Option of importing images in standard formats (.jpg, .bmp) and converting them into surfaces for the programming of bas relief and high relief machining operations.
- ✔ Simulates the removal of material.

EASYSTONE MASTER - 5 AXIS

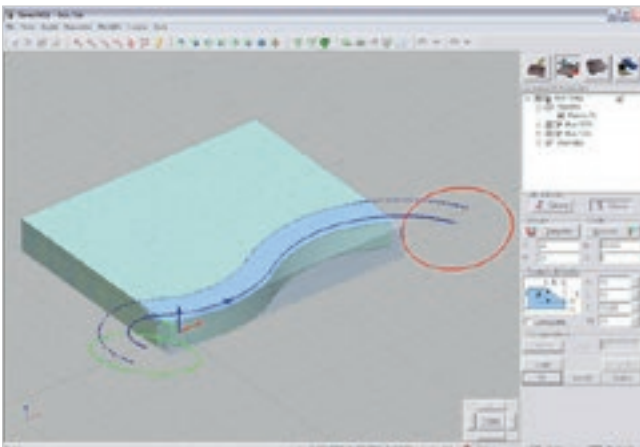
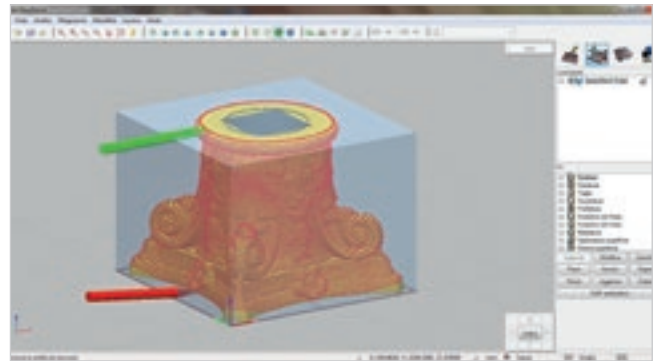
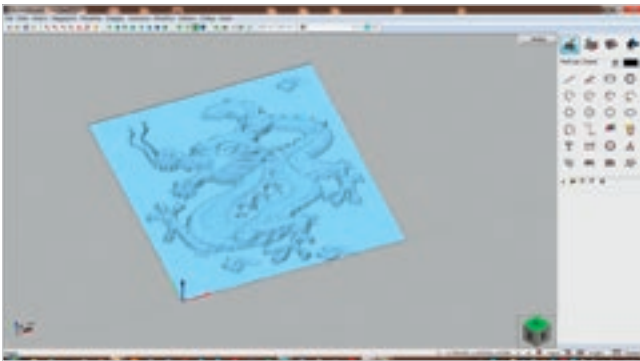
Besides the EasySTONE Master 3-Axis functions, allows for the programming of 5-axis machining operations (bevels, capitals, statues).



EASY STONE

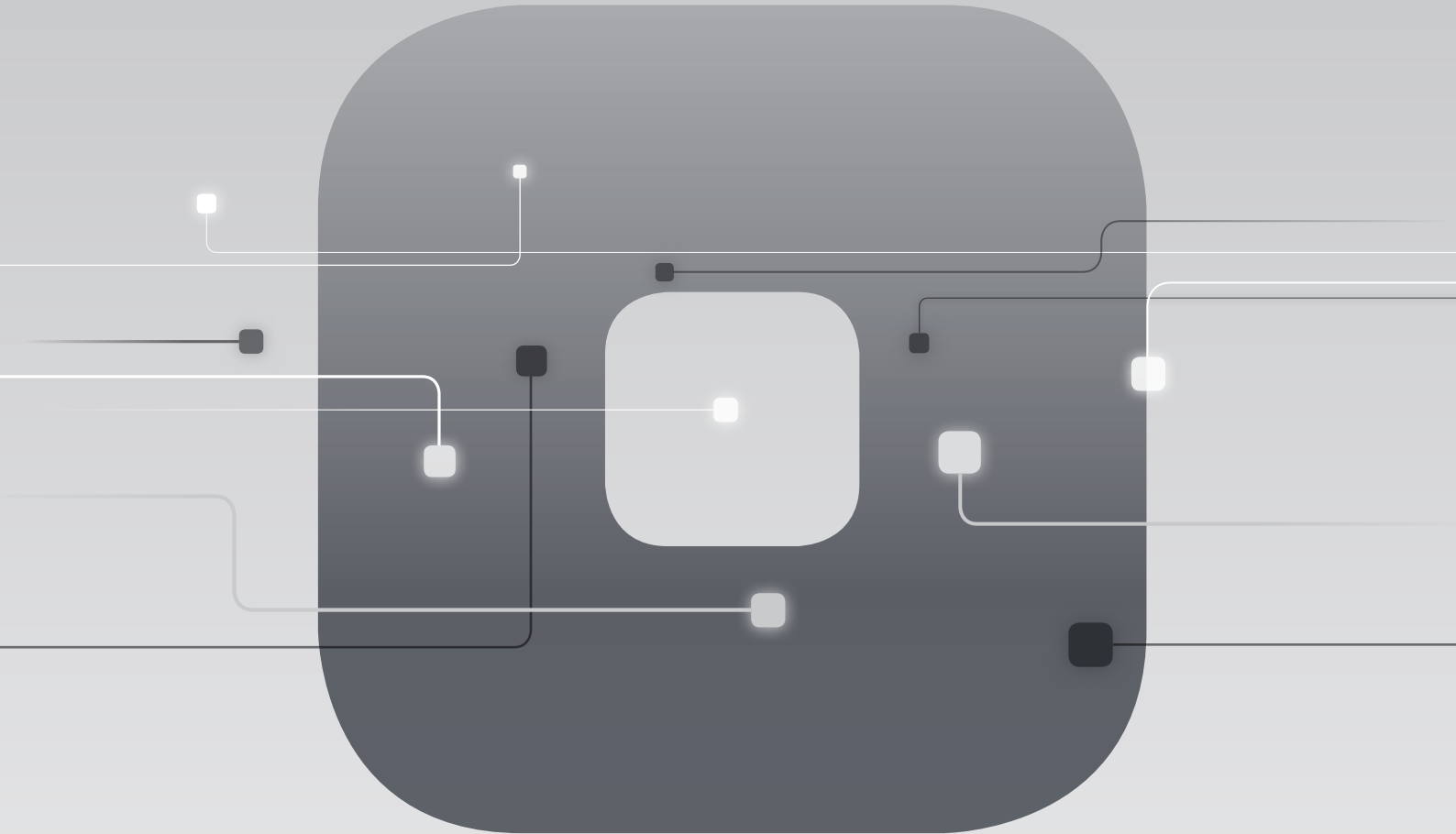
OPTIONAL PACKAGES

- **Automatic CAM:** automatic pairing of machining operations with the pieces on the basis of rules defined by the user for design properties such as layer type of geometry.
- **Office station, multi-centre and network key:** option of generating different types of programs for the office and the Master from a single station beside the machine and of sharing the EasySTONE licence with up to 10 stations connected to the network.
- **Machining operations from below:** option of programming cutting and boring operations from below.



SOPHIA

GREATER VALUE FROM MACHINES



The Biesse IoT platform which enables customers to access an extensive range of services to streamline and rationalise their work management processes.

□ SERVICES

□ PROACTIVITY

□ ANALYSIS



SIMPLE AND INTUITIVE

The new lightweight integrated console (available in the version with steel abutment) is easy to handle and extremely powerful and allows for rapid positioning of the head.



The use of a PC with Windows guarantees a particularly easy, user-friendly approach for the operator and full connectivity with network systems and the optic/magnetic supports available on the market.

CUSTOMER CARE IS WHO WE ARE

SERVICES is a new experience for our customers, to offer not just excellent technology but the added value of an increasingly direct connection with the company, the professionals who work there and the experience they embody.



ADVANCED DIAGNOSTICS

Digital channels for remote interaction online 24/7. Always ready to intervene on-site seven days a week.



A WORLDWIDE NETWORK

39 branch offices, over 300 certified agents, retailers in 120 countries, and spare parts warehouses in America, Europe and the Far East.



SPARE PARTS AVAILABLE IMMEDIATELY

Identification, shipping and delivery of spare parts for every need.



EVOLVED TRAINING OPPORTUNITIES

Lots of on-site, online and classroom training modules for personalised growth.



VALUABLE SERVICES

A wide range of services and software packages to help our customers achieve continuous improvements in performance.

AN EXCELLENT LEVEL OF SERVICE

+550

HIGHLY SPECIALISED
TECHNICIANS AROUND
THE WORLD, READY TO
HELP CUSTOMERS WITH
EVERY NEED

90%

OF MACHINE DOWN CASES
WITH RESPONSE TIME
UNDER 1 HOUR

+100

EXPERTS IN DIRECT
CONTACT THROUGH
REMOTE CONNECTIONS
AND TELESERVICE

92%

OF SPARE PARTS ORDERS
FOR MACHINE DOWNTIME
PROCESSED WITHIN 24
HOURS

+50.000

ITEMS IN STOCK IN
THE SPARE PARTS
WAREHOUSES

+5.000

PREVENTIVE
MAINTENANCE VISITS

80%

OF SUPPORT REQUESTS
SOLVED ONLINE

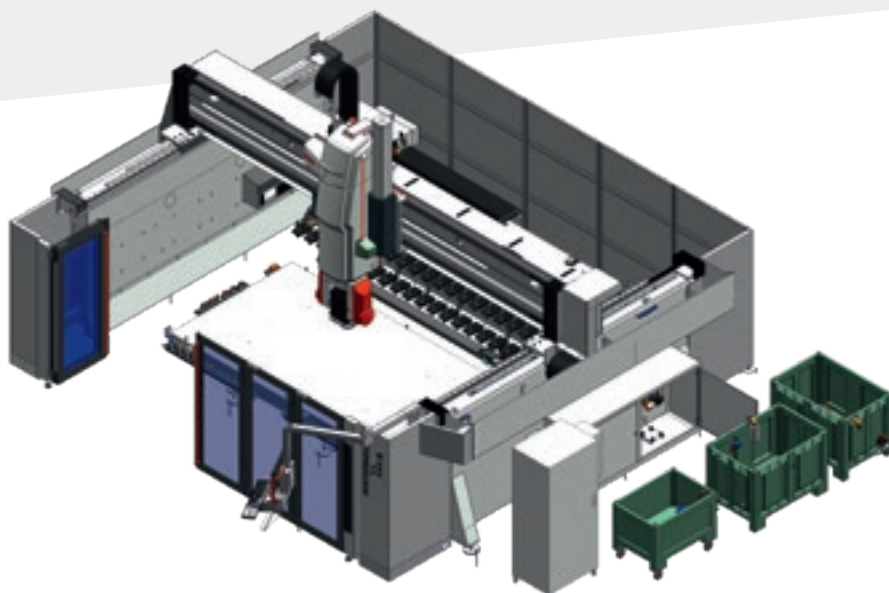
96%

OF SPARE PARTS ORDERS
DELIVERED IN FULL ON
TIME

88%

OF CASES SOLVED WITH
THE FIRST ON-SITE VISIT

TECHNICAL SPECIFICATIONS



MASTER 850

Work table size	mm	3500 x 2000
Work table height	mm	470
Z axis stroke	mm	850
Axis runs for the spindle (X - Y)	mm	4200 x 2700
A axis rotation		-100° ÷ +100°
C axis rotation		unlimited
Maximum velocity for axes (X - Y - Z)	m/min	60 - 50 - 15
Maximum disc diameter	mm	625 (optional)
Tool holder connection		ISO 50
Tool magazine capacity		39 - 59 (optional)
Engine power	kW	20 (S1)
Max electrospindle rotation	rpm	10000
Power required	kW	45

The technical specifications and drawings are non-binding. Some photos may show machines equipped with optional features. Biesse Spa reserves the right to carry out modifications without prior notice.

Sound pressure level on operator workstation (LpA). Milling 78 dB (A). Sound pressure level on operator workstation (LpA) Milling with circular blade 80 dB (A). Master 850-1000: Uncertainty of measurement K = 4dB (A)

The measurement was carried out in compliance with UNI EN ISO 3746, UNI EN ISO 11202 of 2009. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Even though there is a relation between emission levels and exposure levels, this cannot be used reliably to establish whether or not further precautions are necessary. The factors determining the actual noise levels to which the operating personnel are exposed include the length of exposure, the characteristics of the work environment, other emission sources (e.g. the number of machines and machining operations nearby). At any rate, the above information allows the operator to better evaluate dangers and risks.

MADE WITH BIESSE

INDUSTRY AND ARTISANSHIP JOIN FORCES

The Bicefalo is a sculpture in white Carrara marble which was created in the spring of 2015, exclusively using a latest-generation Intermac machining centre with five axes: the Master 850. The work was created by Marmi Fontanelli, from Reggio Emilia, commissioned by Raffaello Galiotto, a renowned designer from Vicenza.

The final product was subject to 223 hours of machining (which corresponds to 38 km in total travelled by the Master 850 machine tools), not including the time spent on manual finishing. The end result is the most effective example of the enormous potential that Italian en-

trepreneurs represent, and their ability to foster surprising synergies between industry and crafts, design and art.

The Bicefalo, measuring around two and a half metres in length, made its first public appearance at the Fuorisalone event in Milan, during the Lithic Digital Design exhibition. It was subsequently installed within the Expo Milano 2015 area.

"In order to carry out this project," commented Claudio Fontanelli, "we pushed the Master 850 to new limits, placing the machining centre's five axes in positions that we thought were impossible. We worked in synergy with Intermac,

and the company provided fundamental support for setting the 54 programs used for grooving and finishing. We had never carried out a project of this type before: a process of continuous consultation was therefore necessary in order to help us to fully exploit this machine's enormous potential.

What's more, Intermac's technology can be used by everyone: speaking from personal experience, I can guarantee that the machinery's bSolid management software allows any operator, even those without any particular computer skills, to get the most out of these systems with minimal effort."



Founded in Italy,
international native.

We simplify your
manufacturing
to make the process
of any material



ur g process potential I shine.

We are an international company that manufactures integrated lines and machines to process wood, glass, stone, plastic and composite materials and what will come next.

Thanks to our rooted competence nurtured by an ever-growing worldwide network, we support your business evolution – empowering your imagination.

Master of materials, since 1969.

Join the
Biesse world.

[biesse.com](https://www.biesse.com)



