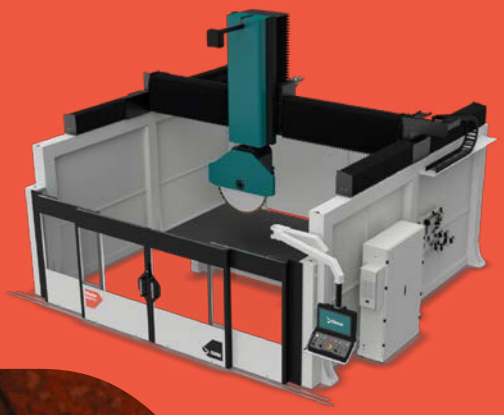
Biesse Machinery Stone | GMM

Master
Multi Pro S WT

Multi-machining | Shape



Biesse

Biesse Machinery
Stone

Master

Machines

Genius

Extended Machines

Identify in a few words
the most suitable machine
for your needs from
our product portfolio.

Machining type

- **Cut** Cutting
- **Edge** Edging
- **Fin** Finishing
- **Multi** Multi-machining

Segment

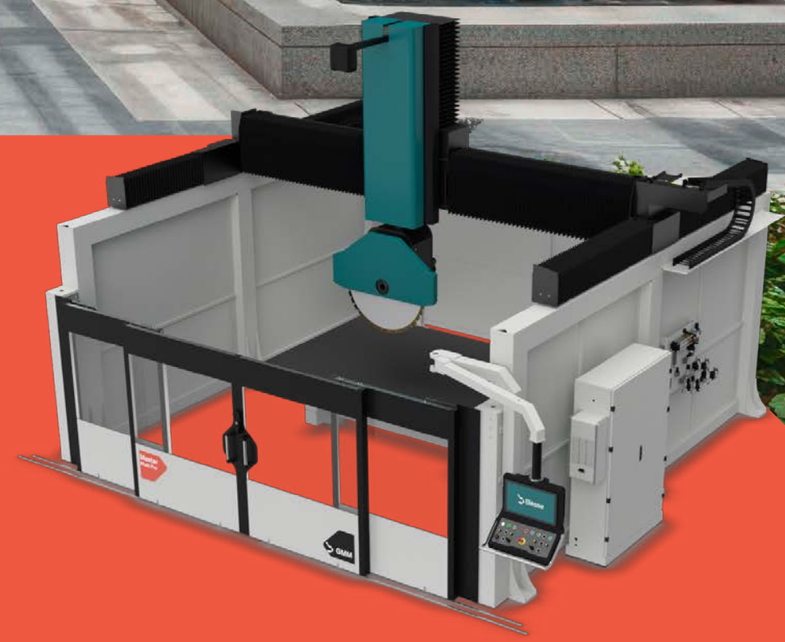
- **Pro** Distinctiveness and performance
- **Up** Agility and expertise
- **Go** Simplicity and compactness

Find your perfect fit

High performance. Fully adaptable.

The Master Multi Pro S WT is a 5-axis stone machining center for slabs and large blocks. Its robust structure and advanced 5-axis head enable straight, inclined, curved, and 3D shaping operations.

Highly configurable in layout and options, it adapts to any production need with precision, reliability, and performance.



Discover more

biesse.com

Master

Multi Pro S WT

Human Machine Interface

Control at your fingertips: smart, intuitive and ready to go. The 21" ergonomic multitouch HMI is integrated into the machine controls, supported by GMM software designed to be simple, innovative and intuitive, enabling quick and efficient start-up of any stone-processing job.

Z strokes

This machine offers configurable Z-axis strokes of 1000, 1300, 1600, and 2000 mm.
Combined with adjustable or multiple worktable heights, this flexibility allows machining of a wide range of material thicknesses, adapting to every production need.

5 Axis Technology

Unlock complex cuts with ease. The 5-axis bridge saw enables advanced stone processing with precision. Its head moves and rotates in multiple directions, allowing complex shapes and angles to be cut efficiently, all while maintaining stability and accuracy.

Two Versions

The machine is available in two versions to meet different production needs. The L version is ideal for standard slabs and medium-thickness blocks, while the Z version handles large blocks and complex 3D components with ease.
Both deliver precision, efficiency, and full adaptability, with modular layouts and optional features to fit any workflow.

Automatic Tool Changer

Smooth transitions for nonstop productivity.
The automatic tool magazine, available with 12 or 24 ISO50 positions, enables fast tool changes and keeps machining workflows efficient, even when handling large or heavy tooling setups.

Highly Configurable and Adaptable

This machine is fully configurable to meet any production requirement. Its modular design supports multiple work tables, automatic unloading, tool magazines, or even a lathe, while maintaining workflow efficiency and safety. Ideal for homeware, interior design, architectural elements, funerary art, or large-scale stone blocks, it adapts to every project, from slab cutting to massive 2-meter blocks.

Lathes

Precision shaping made simple.
Lathes rotate the workpiece for accurate turning operations, allowing smooth and controlled material shaping. They support a wide range of configurations, making them versatile tools for diverse machining needs.

Built for Tough Conditions

The machine's architecture features solid cast-iron and hot-dip galvanized steel components, ensuring strength and long-term stability. Its construction resists water, dust, and abrasive stone particles, making it ideal for wet cutting, marble, granite, and demanding workshop conditions.

Materials

- **Ns** Natural Stone
- **Es** Engineered Stone
- **Ss** Sintered Stone

Stone

We design and manufacture stone-processing machines for the furniture, building and construction sectors, delivering the ideal solution for specific production requirements.

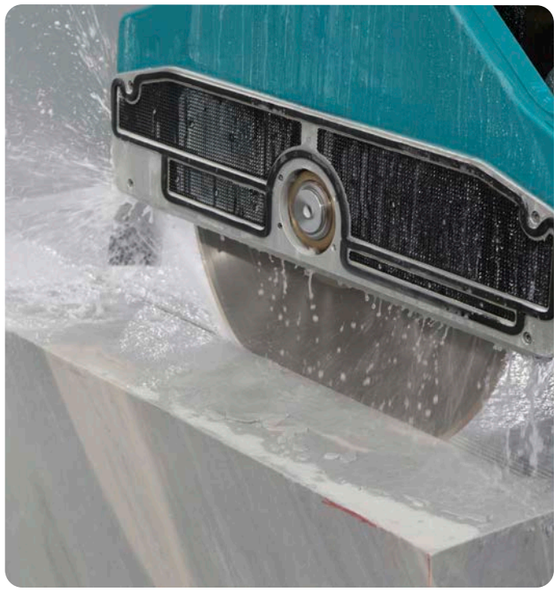
- Homeware furniture
- Homeware decorations
- Architectural
- Funerary
- Building
- Urban

Cutting

The machine is designed for slab cutting with saw blades ranging from 625 mm to 1300 mm in diameter, offering exceptional flexibility for different production needs. It achieves a maximum cutting depth of up to 512 mm, allowing precise and efficient processing of both thin and thick slabs. The wide range of blade sizes and significant cutting capacity make this machine ideal for industrial applications that demand accuracy, reliability, and consistent performance.

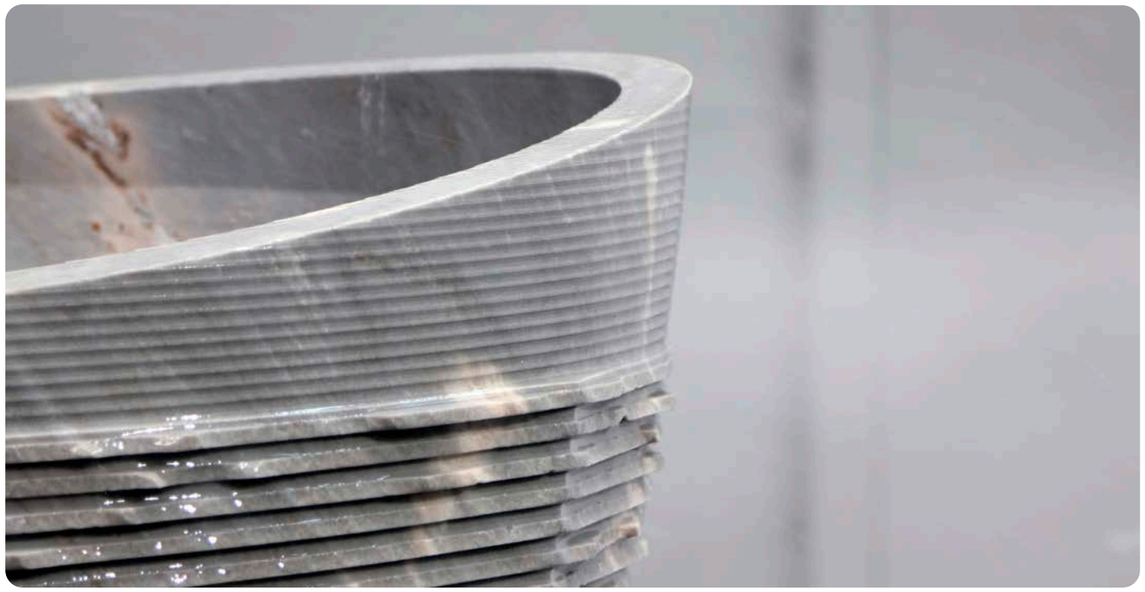
Complex 3D Shaping

The machine excels in shaping complex stone components by intelligently interpolating five axes to follow CAD-defined paths with precision. It can contour profiles, sculpt three-dimensional surfaces, produce decorative edges, create detailed reliefs, drill holes and even execute spiral or artistic forms in materials like marble, granite and engineered stone. This advanced motion control allows it to turn flat surfaces into finished architectural elements, sculptural pieces, intricate mouldings and bespoke designs with high repeatability, making it a versatile centerpiece for any workshop focused on high-end stone fabrication.



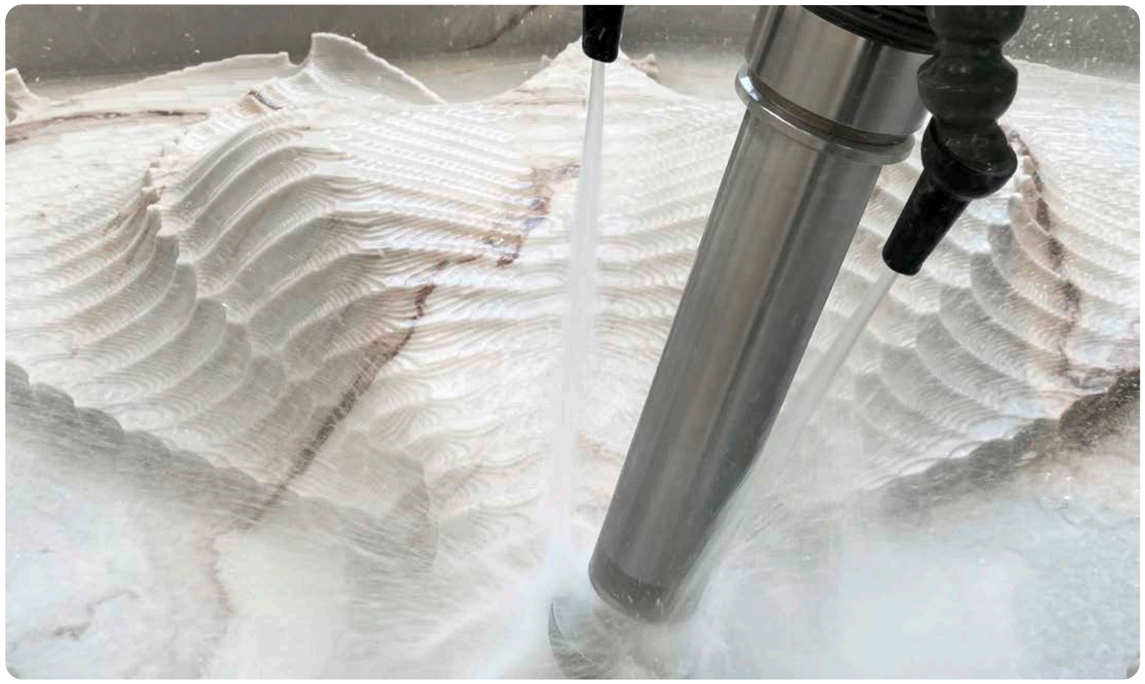
Disc roughing

Router Spindle roughing and milling

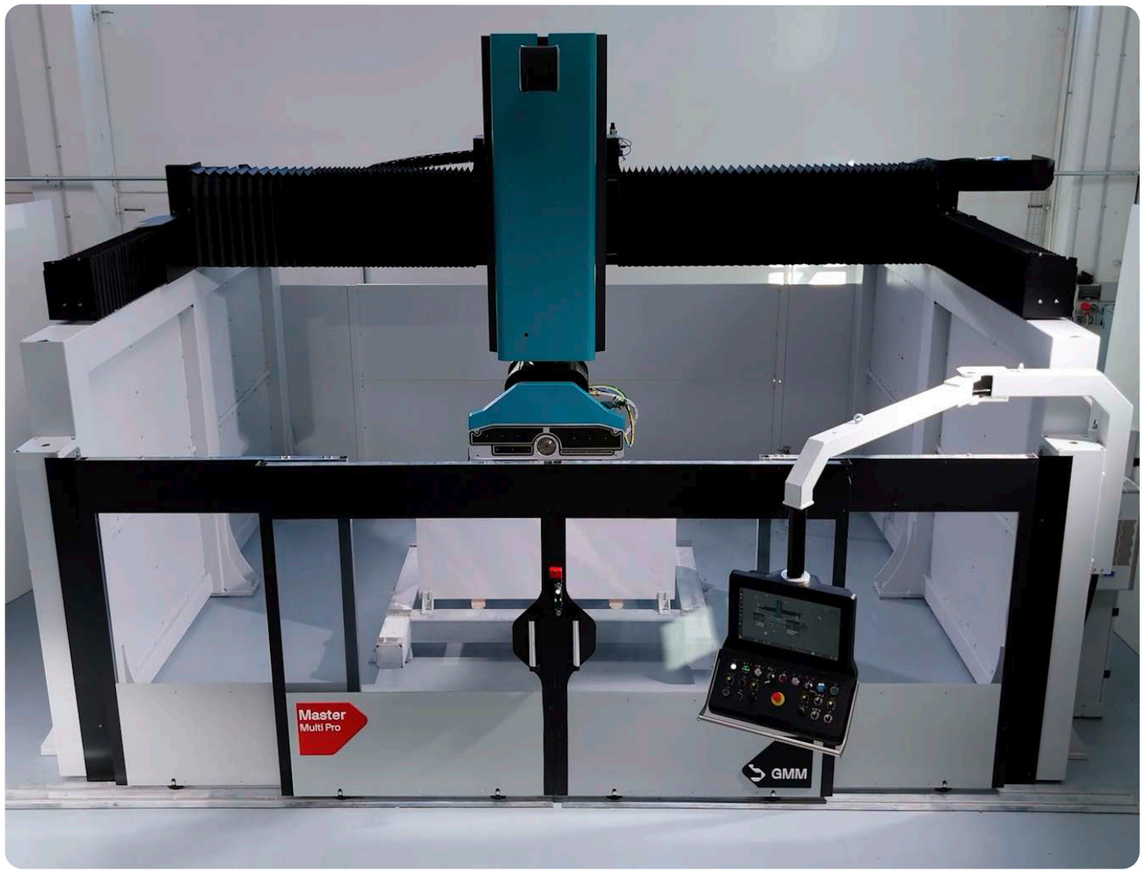


Disc grinding and smoothing

Disc modeling



Router Spindle modeling



Extended Z-Axis Versatility for Every Stone Application

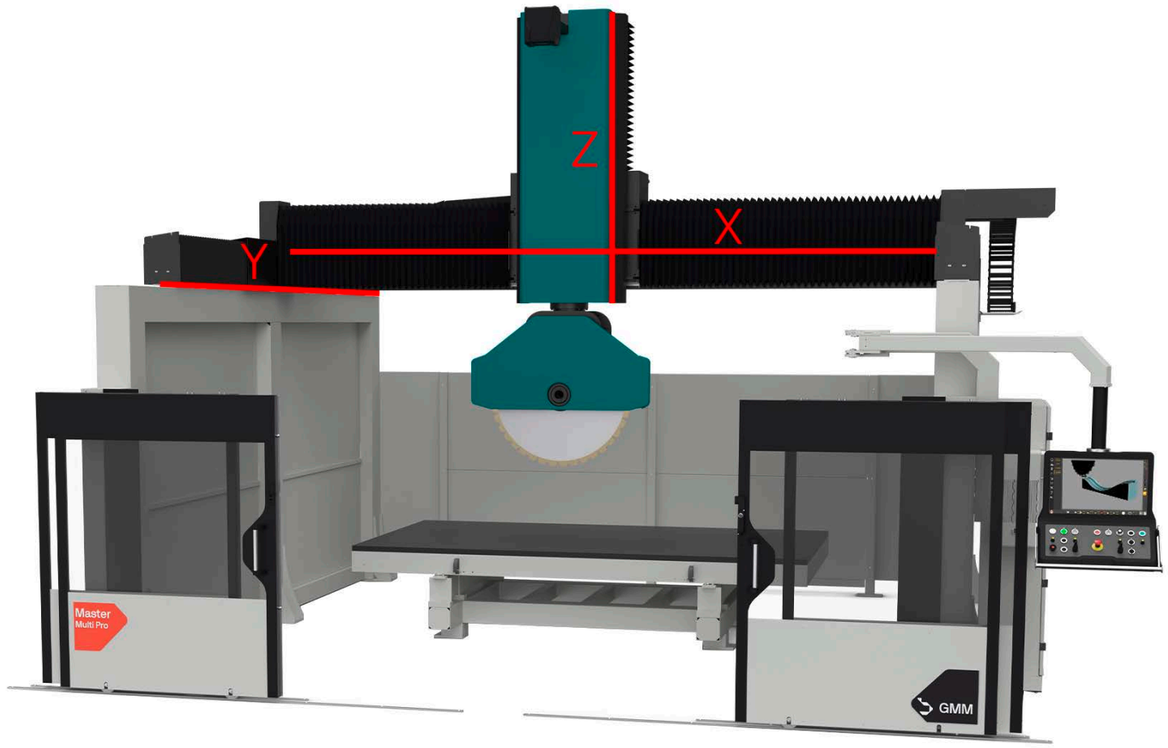
The machine is available with four Z-axis stroke options (1000, 1300, 1600, and 2000 mm), providing the versatility needed to process everything from thin slabs to stone blocks up to 2 meters high with consistent precision and stability along the entire vertical travel. This extended working range allows the machine to effectively serve multiple application sectors, including a full range of home furniture, both for indoors and outdoors, funerary art, construction, and urban furnishing, ensuring reliable performance across both standard production and more demanding three-dimensional machining tasks.

Modular and Configurable Machine Layout

The modular machine architecture allows structural dimensions to be configured according to specific production layouts and workspace constraints. The configurable beam length enables tailored configurations that optimize workflow and space utilization, while the modular structure ensures efficient integration within different production environments. For greater installation flexibility, steel walls can be supplied as an alternative to standard concrete walls, allowing the machine to adapt easily to both compact workshops and large-scale industrial setups.

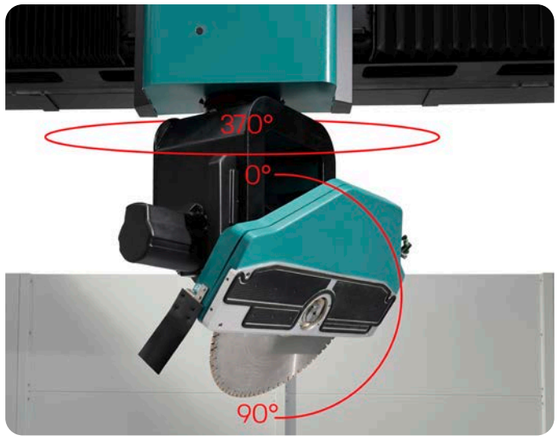
Complex machining made simple with 5-axis technology

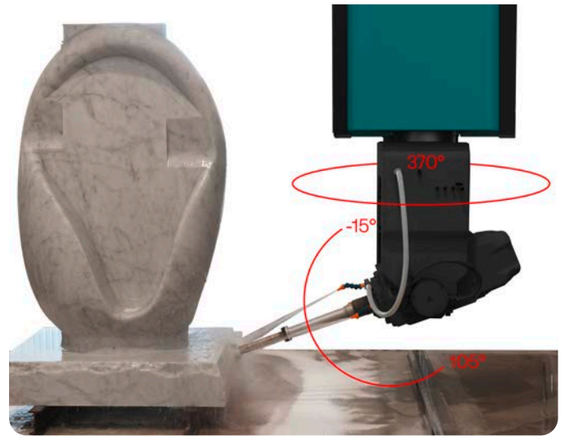
A 5-axis bridge saw delivers high-precision stone processing thanks to its rigid bridge structure and fully interpolated movement across all linear and rotary axes.
The complete 5-axis configuration enables complex machining in a single setup, improving accuracy and overall workflow efficiency.
Compatible with CAD/CAM programming, it executes advanced tool paths such as angled cuts, contouring, pockets, profiles and 3D elements while maintaining optimal tool orientation for superior finish quality and reduced tool wear.
From countertops and mitered edges to multi-depth decorative pieces, a 5-axis bridge saw offers outstanding versatility, precision and productivity for both artisan and industrial applications.



X-Y-Z axes

X, Y, Z control positioning and depth, forming the fundamental 3D workspace for any kind of processing.





Tilting and Rotating axes

The tilting movement pivots the head vertically to position the tool at the optimal cutting angle.
With the blade guard installed, the range is 0° to 90°.
When using more compact tools, the tilting travel extends to -15° to 105°, allowing the head to move slightly past vertical in both directions for greater flexibility on complex geometries and undercuts.The rotating movement turns the head around the vertical axis, providing a continuous range of 0° to 370°.
This enables full circumferential access to the workpiece without repositioning, improving accuracy and reducing setup time

Lathe. The sixth axis

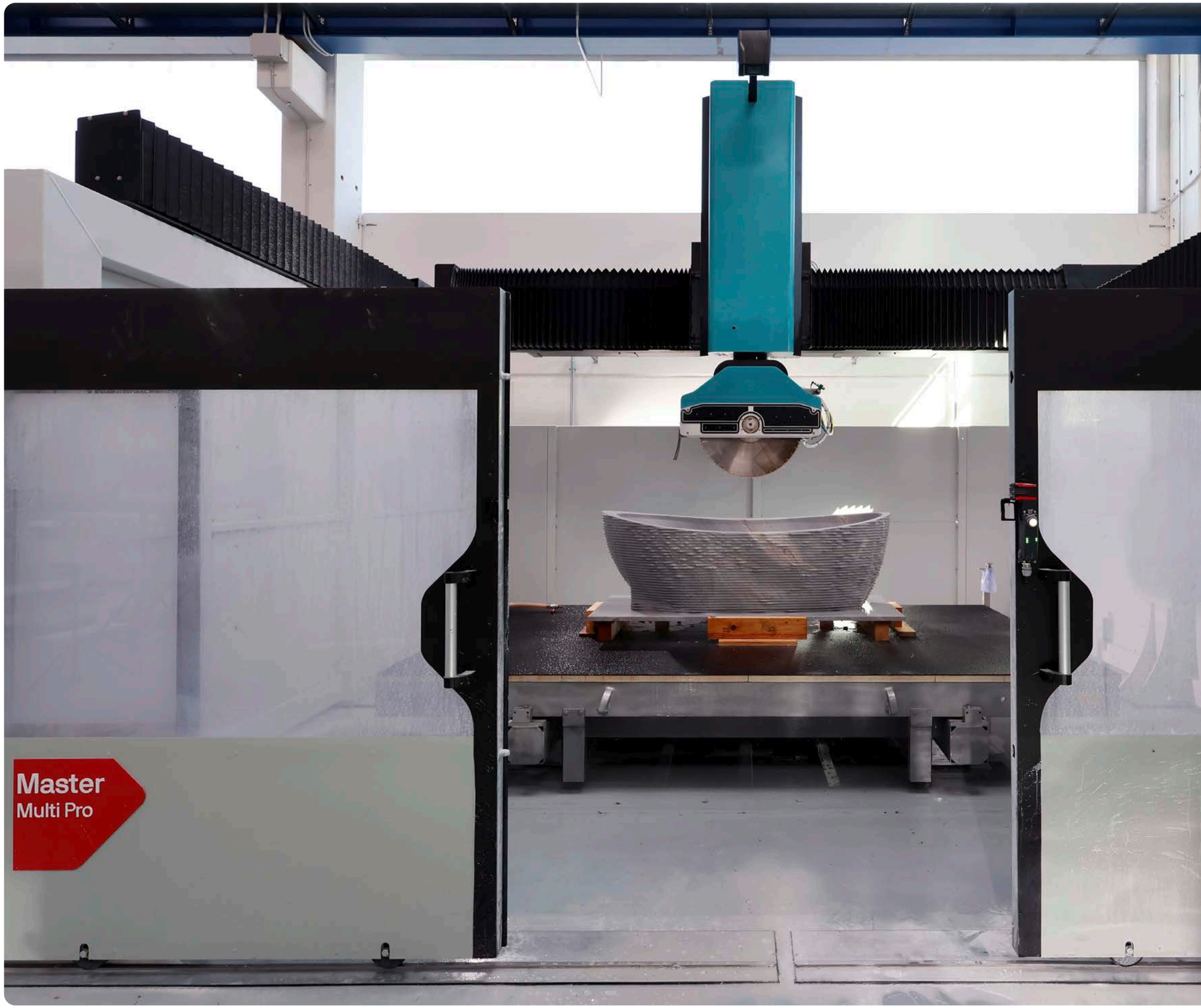
The machine can be equipped with an integrated lathe to extend its capabilities beyond standard processing, enabling turning operations on columns and three-dimensional elements.
This additional axis allows the machining of round or complex sections with high stability and precision, expanding the range of possible applications and supporting both architectural and decorative stone components.

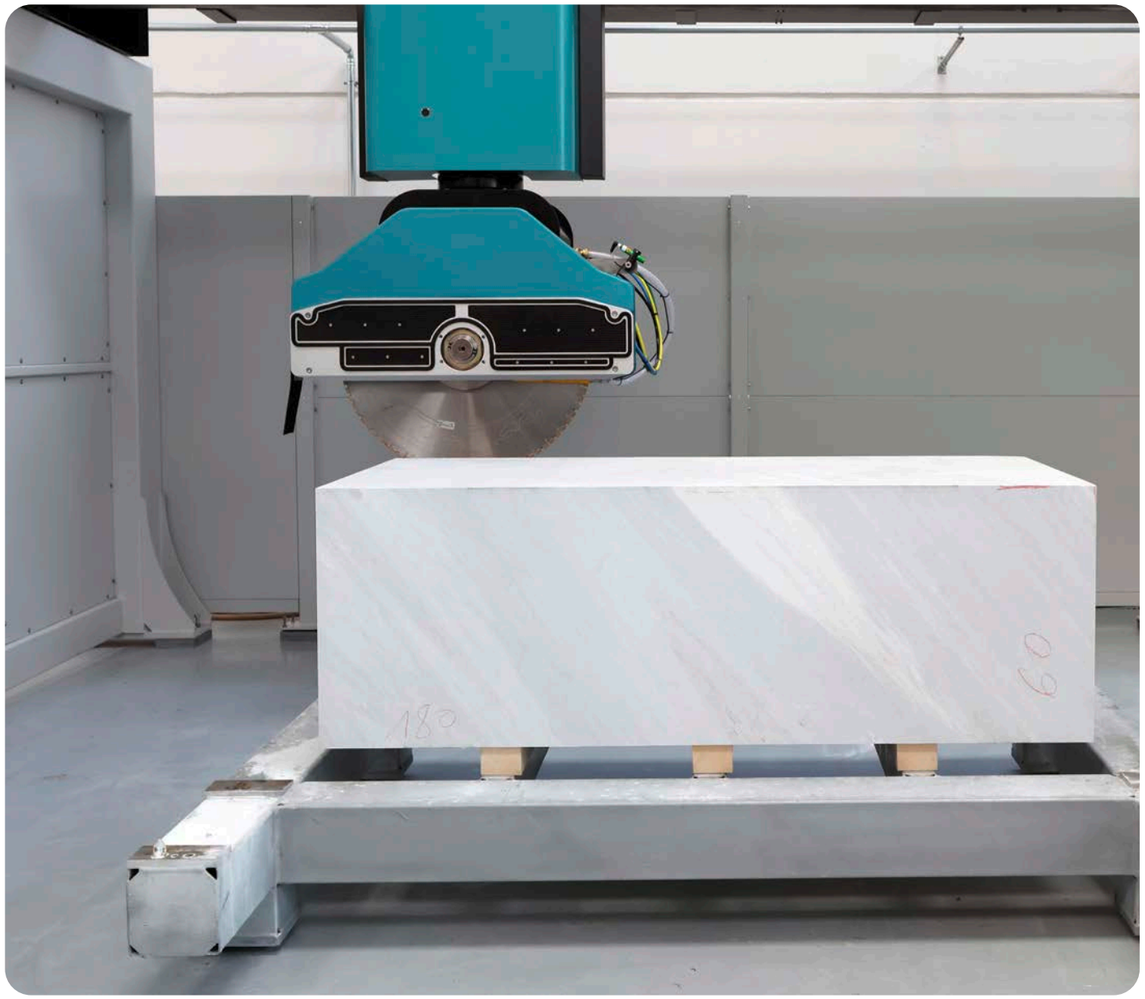
Power Motor Configurations

The machine is available with two blade motor options to suit different processing needs. The 33.3 kW (S6) water-cooled motor features a through-spindle design, enabling efficient drilling and core-drilling operations while maintaining precise cutting performance. Alternatively, the 40 kW (S6) water-cooled motor with ISO 50 cone provides maximum power and rigidity for heavy-duty cutting applications, ensuring stable performance under continuous workloads.

Working Tables for Maximum Processing Flexibility

Working tables are a key element in this type of machine, especially when processing large slabs or high-thickness materials. Since the Z-axis travel has a physical limit, the ability to lower, tilt or remove the table becomes essential to handle different material sizes and optimize machining conditions. A wide range of table configurations is available, from fixed and tilting solutions to multilevel and reinforced structures, each designed to support high loads, simplify material handling and adapt the working height to specific production needs. This flexibility allows operators to maintain optimal cutting or processing geometry, improve ergonomics and ensure efficient workflow even when working with oversized or heavy stone elements.





Hydraulic tilting table

Hydraulically driven table designed to simplify slab loading with crane operations.

Tilts from 0° to 85° and supports high loads,improving ergonomics and handling efficiency.

Fixed table

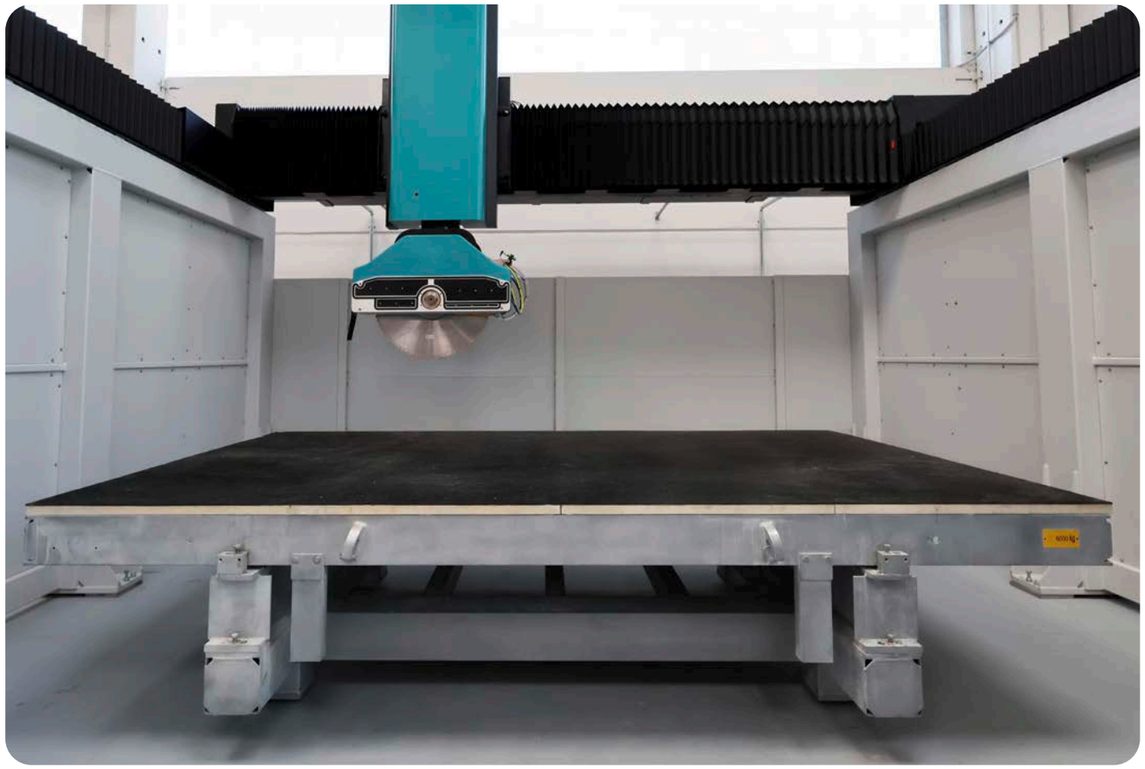
Robust galvanized structure designed for stable processing of one or multiple slabs.

High load capacity and large working surface ensure reliability for standard slab operations.

Multilevel table

Adjustable working height enables optimal positioning for slabs or thick pieces.

Provides flexibility to adapt the machine setup to different materials and processing requirements.



Tilting and removable table

Dual-level solution that allows the tilting section to be removed to gain additional Z-axis clearance.

Ideal for processing slabs of varying thicknesses while maintaining flexibility and accessibility.

Reinforced steel table

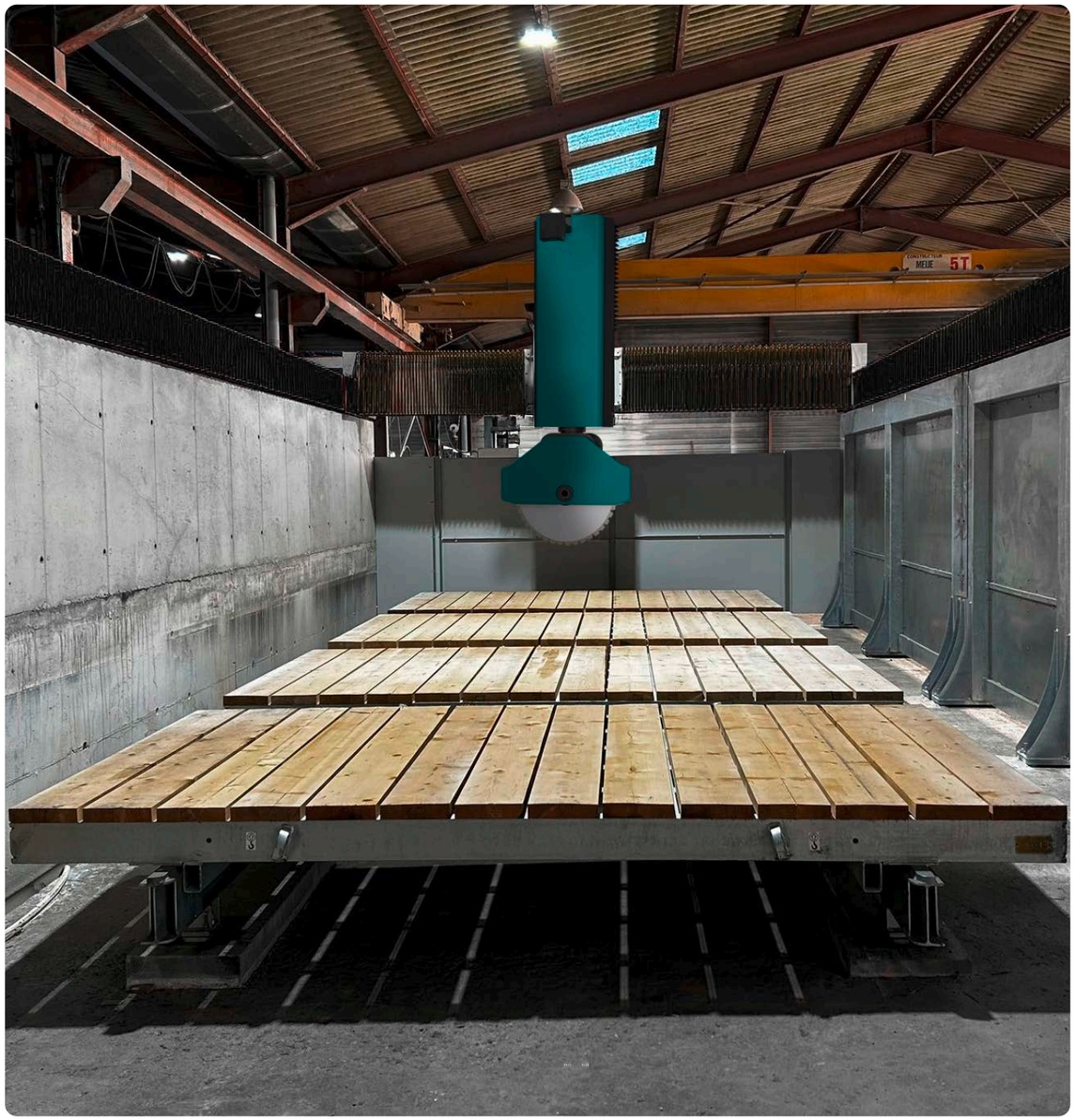
Heavy-duty tables mounted on floor beams for maximum stability and load capacity.

Designed for high-throughput production with multiple working positions and continuous machining.

Low table support

Low-profile support system that speeds up loading and unloading operations.

Ideal for multi-table workflows, helping maintain continuous production cycles and material flow.



12-24 positions ISO50

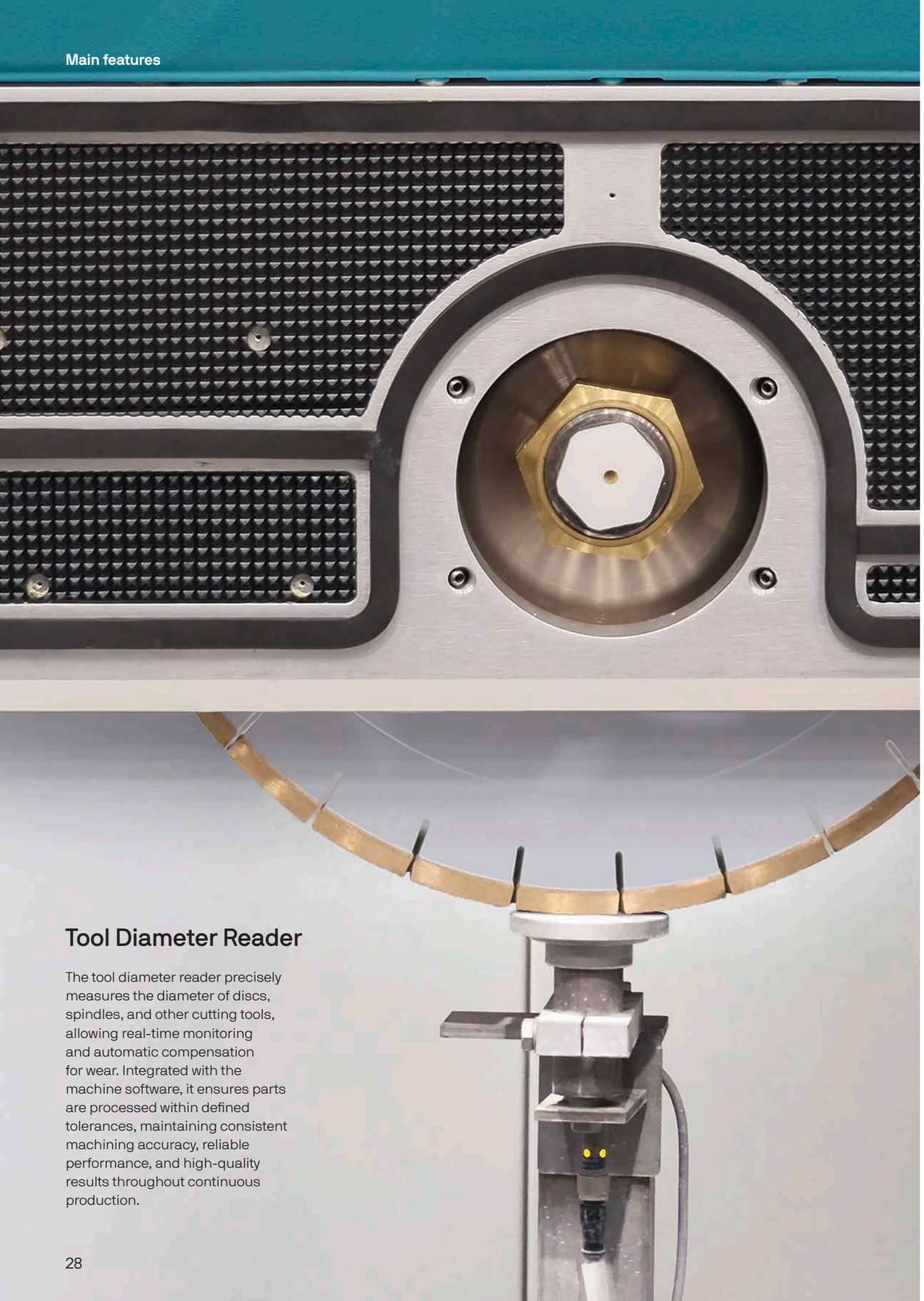
Automatic tool magazine with 12 or 24 ISO50 positions, designed for automatic tool change. Ensures fast transitions between tools and optimized machining workflows, even with large or heavy tooling setups.

Tool changer systems

Compact, efficient, and fully integrated, these tool magazines are designed to support fast and reliable tool changes during machining operations. They ensure maximum uptime by minimizing interruptions and are engineered to handle multiple tool types with precision. Available in different configurations to match production needs, they guarantee smooth transitions, reduce setup times, and improve overall machining performance.

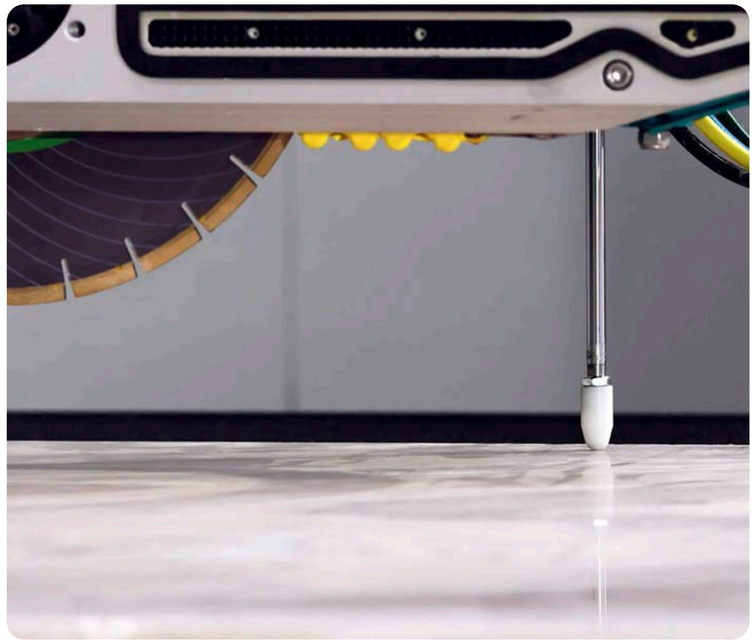
Automatic disk change system

Compatible with ISO50 cone tools and blades up to Ø625 mm, enhancing efficiency and precision in CNC bridge saw operations.



Tool Diameter Reader

The tool diameter reader precisely measures the diameter of discs, spindles, and other cutting tools, allowing real-time monitoring and automatic compensation for wear. Integrated with the machine software, it ensures parts are processed within defined tolerances, maintaining consistent machining accuracy, reliable performance, and high-quality results throughout continuous production.

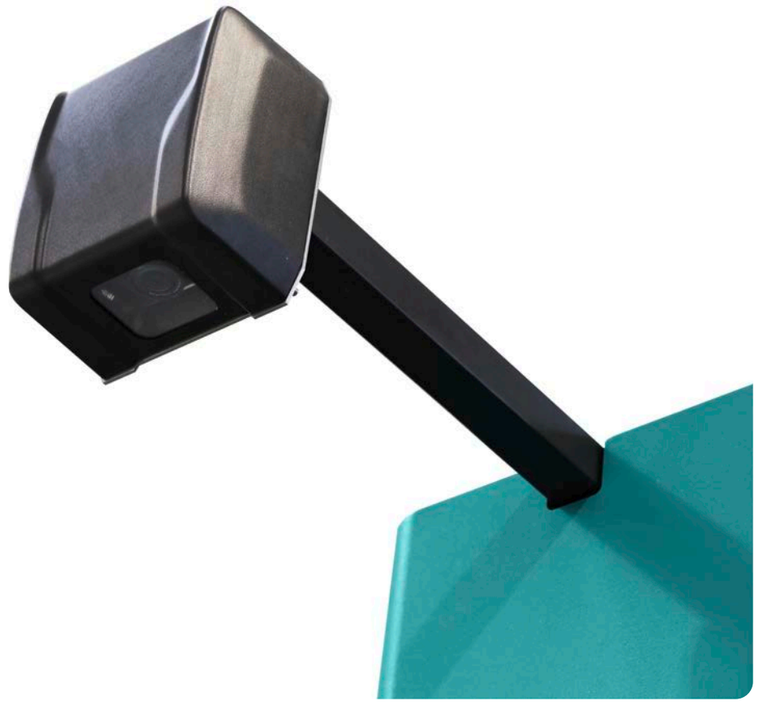


Slab Thickness Reader

The slab thickness reader automatically measures material thickness, compensating for any variations during processing. This ensures consistent cutting accuracy, optimized material use, and precise machining, essential for operations like inclined cuts. The compensation is fully automatic, integrated directly into the machining cycle for seamless workflow.

Camera System

The on-board HD camera, integrated with the machine head, captures the material from the optimal perspective, delivering pixel-to-millimeter accuracy. Dynamic alignment ensures flawless edge detection, minimal shadow interference, and consistent high-resolution imaging. This crystal-clear vision enables precise piece positioning, real-time adjustments, and error-free machining, enhancing efficiency and reducing material waste.



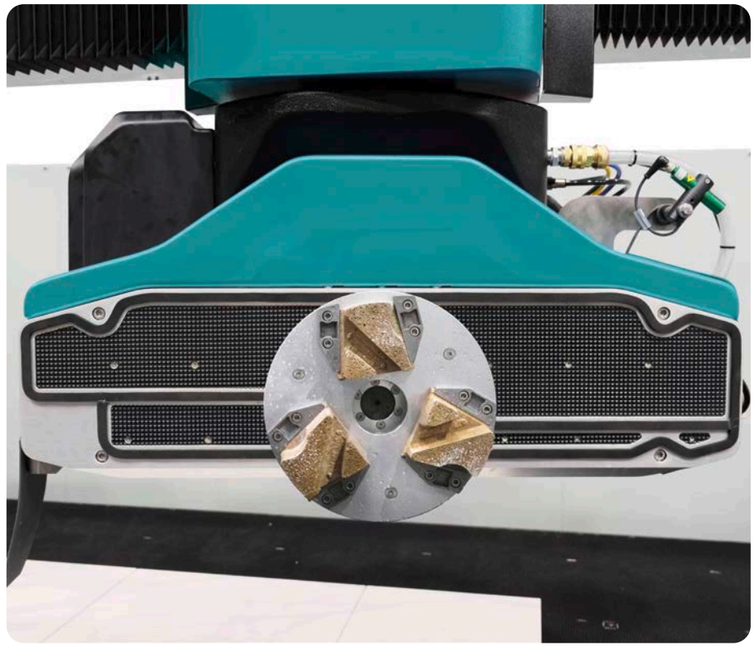
Optical Laser

The optical collimator projects a visible reference line onto the material surface, enabling precise blade alignment.
It simplifies setup, ensures each cut starts exactly where intended, reduces waste, and improves workflow efficiency for accurate, high-quality machining.

Plate for Polishing

The Ø320 mm polishing plate is designed for high-quality surface finishing and works in combination with the dedicated polishing software. Equipped with a 36x2 3-Frank attachment system, it ensures secure tool fastening and stable operation during all polishing phases.

This plate enables precise, uniform finishing across a wide range of stone materials. Use of the Polishing Program software is required for full functionality and optimized performance.



Vacuum System

Save time and energy with the fully automated, patented vacuum system, mounted on the machine head and perfectly aligned with the Z-axis.
The patented system ensures unparalleled precision when lifting and moving pieces, without any oscillations. The specific design of suction pads and reinforced cast-aluminum components allow clean repositioning. The software automatically coordinates cutting, lifting, and moving for uninterrupted workflow and optimized material use.

Safety Barriers

Robust safety barriers protect the operator during cutting or machining:
when the machine is working, they form a complete shield around dangerous areas, preventing access and containing water splashes and debris.
When open, they allow full and easy access to the work area for loading, unloading, or maintenance, combining maximum safety with practicality and operational flexibility.

Smart Touch, Full Control

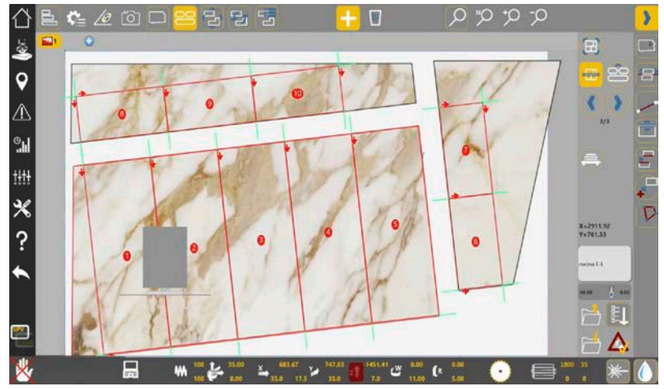
The ergonomic 21” multitouch color display combines intuitive hardware controls with advanced software, enabling operators to start any machining process easily. Manual and semi-automatic controls, including switches and joysticks, allow precise adjustments, while the unified interface across different machining types ensures faster learning, smoother workflow, and effortless operation. Real-time feedback provides previews of processes, minimizing errors and optimizing productivity.

GMM Software

Unlock your machine’s full potential with GMM software. Designed for precision, efficiency, and ease of use, it provides advanced features tailored for every application. Intuitive and user-friendly, it simplifies programming, optimizes workflows, and ensures consistent high-quality results across all machining operations.

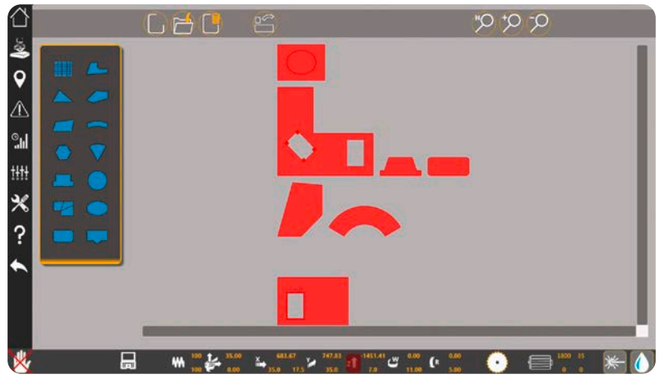
Cuts from CAD

This module allows simultaneous use of up to three tools: disc, milling cutter, and drill bit for vertical, angled, and curved cuts, as well as milling and drilling. Slab positioning is simplified: on camera-equipped machines, a photo captures the material, while probe-equipped machines detect thickness automatically. Drawings can be loaded from saved files, parametric shapes, or nested rectangles/squares, and then moved, rotated, or precisely positioned. Features like the Magnet function combine multiple cuts efficiently, while collision alerts and automatic resolutions with the vacuum system ensure safe and smooth operation.



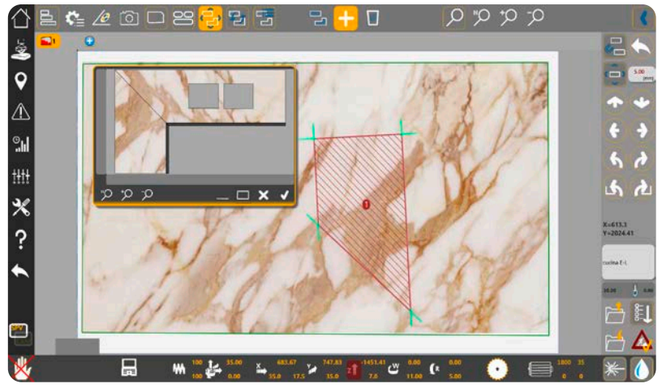
Parametric Shapes

Parametric Shapes provides an easy way to create commonly used stone-working geometries. A wide range of editable templates, such as L-shaped countertops, rectangular cutouts, angled sides, grooves, drainboards, faucet holes, and reinforcement slots, can be fully customized. Dimensions, angles, bevels, offsets, and internal radii can all be adjusted to meet precise design requirements, streamlining production and ensuring accuracy.



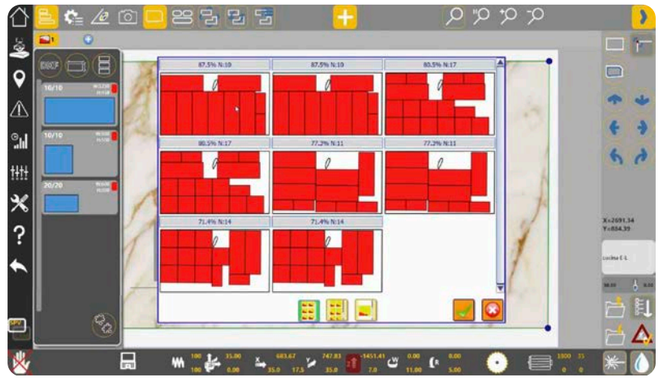
Vein Match

Vein Match brings out the natural beauty of stone, ensuring flawless alignment of veins across book-style walls, continuous-vein countertops, and premium flooring. The software allows precise adjustments before cutting, while the high-resolution camera captures every detail. Real-time previews on the 21” touchscreen optimize material usage, streamline production, and guarantee a high-impact, seamless finish.



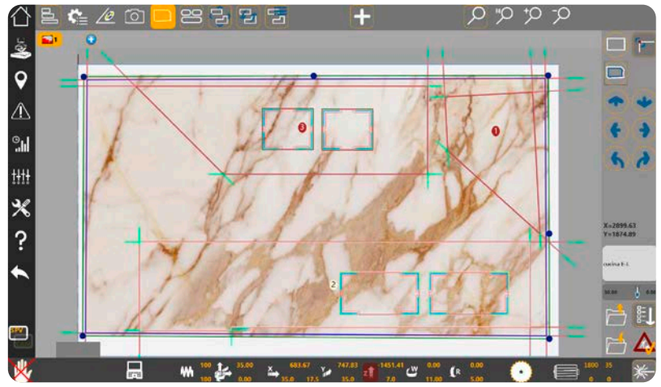
Automatic Nesting

The Automatic Nesting utility efficiently groups multiple parts and assigns them to different slabs. Users define part sizes, quantities, and cutting priorities, and the software automatically arranges them for optimal material use. Slabs are selected from the database or inventory, with vacuum system movements considered for CAD cuts. Nesting layouts can be saved, recalled, or sent directly to the CAD cutting page, ensuring efficient, precise, and constraint-compliant production for the CAD cuts.
Even if the result may not always appear optimal to a trained eye, the positioning respects all constraints and available slab sizes.
At the end, the nesting layout can be saved and recalled later, or sent directly to the CAD cutting page for execution. At the top, you’ll see all the slabs and their assigned pieces, ready for cutting.



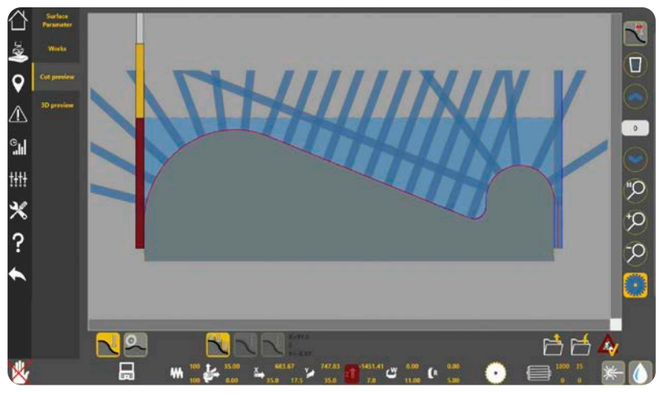
Sintered Material

This feature enables precise cutting of ultra-compact and synthetic materials. Operators can set cutting parameters via the slab perimeter and define material removal to manage slab de-tensioning.
An optional function automatically extends closely spaced cuts up to a defined maximum distance, optimizing workflow and ensuring consistent, high-quality results.



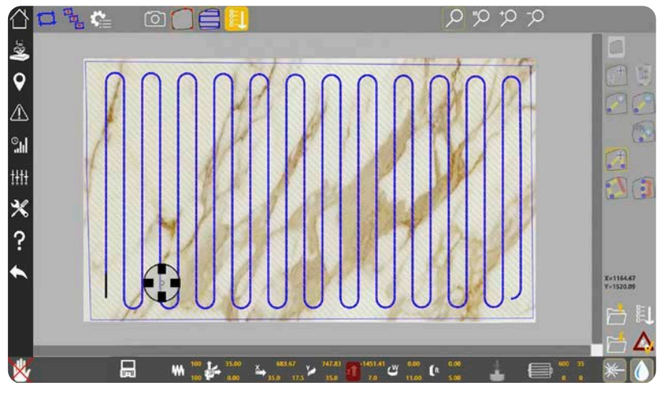
Profile and Shape

This module allows creation of profiles, shapes, or combined profile-shape operations using vertical or horizontal discs. For simple profiles, the disc can remain perpendicular to the material surface, ensuring superior finish. The machine supports roughing for fast material removal, finishing for smooth and precise surfaces, and spatulating, where the disc works sideways to achieve special contours and effects.



Flat Polishing

Flat Polishing manages polishing through customizable tool cycles and sequences. Operators select the tool, set parameters such as diameter, height, RPM, and wear, and define movement types: perimeter, horizontal, vertical, or wave. Multiple pieces with varying heights can be processed, and work areas or tools can be adjusted dynamically. Cycles and sequences are previewed and modified for maximum flexibility, precision, and consistent high-quality finishing.



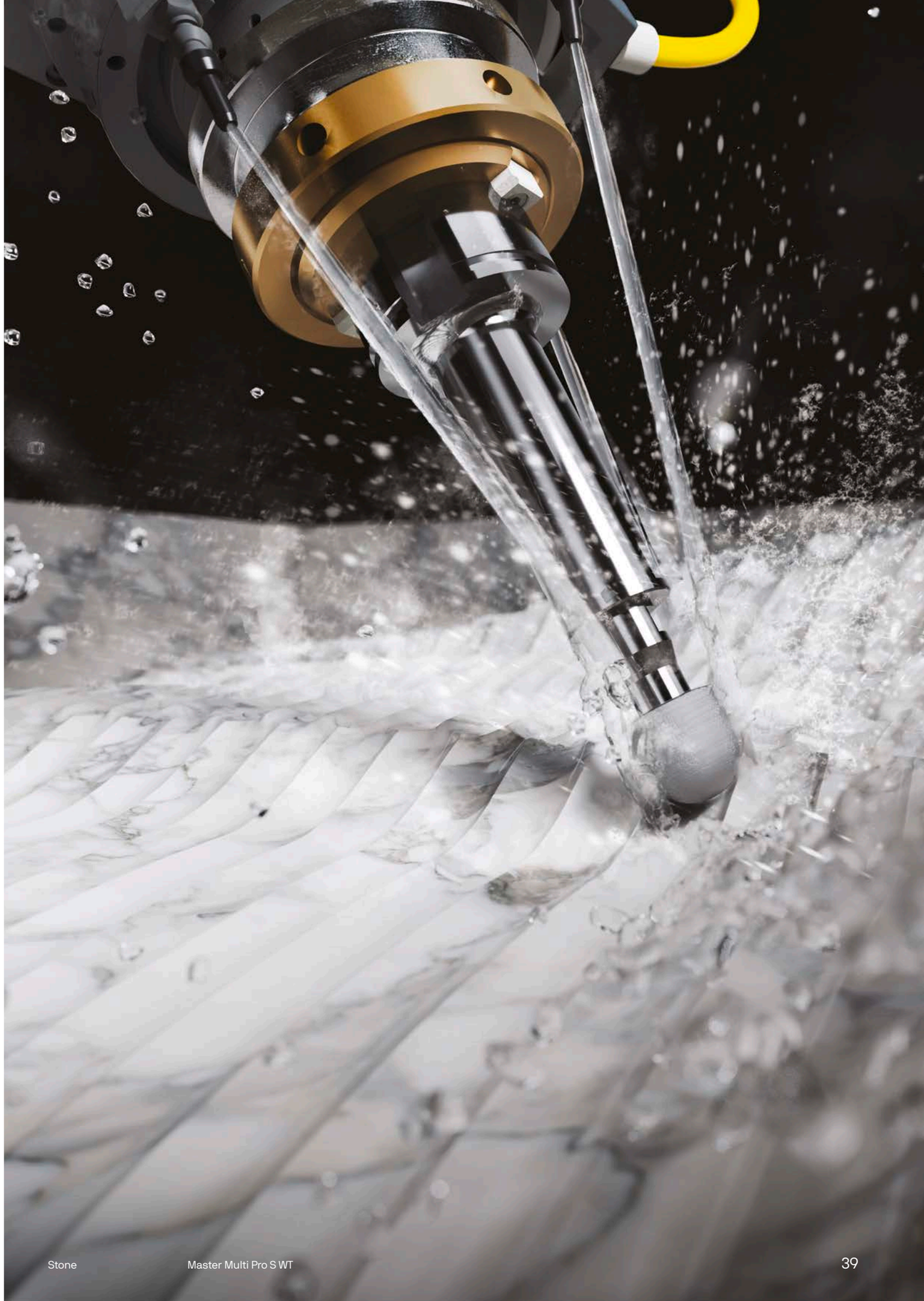
Configurations

This document includes information about optional features.
Scan the QR Code to access the configuration scheme
and verify standard and optional equipment.

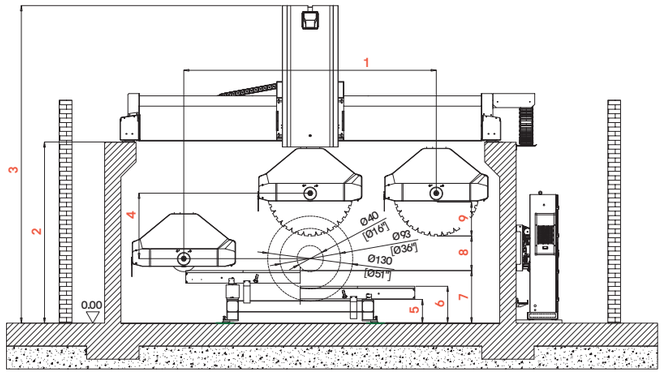
Technical Specifications

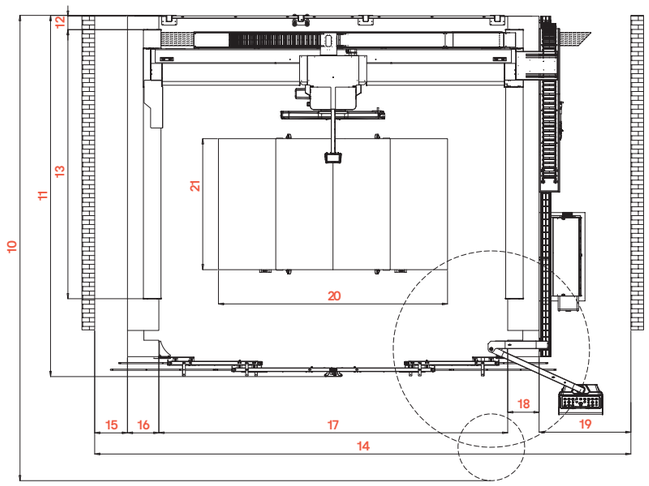
		Version L5	Version Z5
Interpolated Axes	n°	5	5
Maximum longitudinal stroke (X Axis)	[mm] [in]	3850 [151.7"]	3900 [153.5"]
Bridge translation (Y Axis) (Min/Max Std defined)	[mm] [in]	2940 to 9500 [115.7"- 374.01"]	3650 to 14450 [143.7"-568.8"]"
Maximum vertical travel of the blade (Z Axis)	[mm] [in]	1000 [39.3"]	1300 / 1600 - 2000 [51.1"- 62.9" - 78.7"]
Maximum Blade Orientation Angle (W Axis)	°	0 ÷ 370	0 ÷ 370
Maximum blade tilting (R Axis)	°	-15°÷+105° / 0°÷+90°	-15°÷+105° / 0°÷+90°
Worktable Area	[mm] [in]	3500 x 2000 [137.79"] x [78.74"]	3500 x 2000 [137.79"] x [78.74"]
Worktable Area with table extension	[mm] [in]	3500 x 2460 [137.79"] x [96.8"]	3500 x 2460 [137.79"] x [96.8"]
Maximum blade diameter std /Optional	[mm] [in]	Ø 925 / Ø 1100 - Ø 1300 [Ø 36.4" - Ø 43.3" - Ø 51.1"]	Ø 925 / Ø 625 - Ø 1100 - Ø 1300 [Ø 36.4" - Ø 24.6" - Ø 43.3" - Ø 51.1"]
Maximum cutting depth	[mm] [in]	280 / 512 [11.8"] / [13.77"]	280 / 512 [11.8"] / [13.77"]
Blade Hole for Std Motor / Blade hole for Iso 50 Cone	[mm] [in]	Ø 60 / Ø 95 [Ø 2.36"] / [Ø 3.54"]	Ø 60 / Ø 95 [Ø 2.36"] / [Ø 3.54"]
Blade Locking Flange Diameter	[mm] [in]	253,5 / 266 [9.98"/10.47"]	253.5/266 [9.98" / 10.47]
Blade motor power std / Iso 50 Cone	[kW]	33.3 (S6) / 40 (S6) water cooling	33.3 (S6) / 40 (S6) water cooling
Torque	[Nm]	338.2 / 273	338.2 / 273
Variable Blade Speed for Std Motor / for Iso cone 50 Motor	[rpm]	450 ÷ 6000 / max 8000	450 ÷ 6000 / max 8000
Variable Sledge Cutting Speed (X Axis)	[m/min] [ft/min]	37 121.36	37 121.36
Variable Sledge Cutting Speed (Y Axis)	[m/min] [ft/min]	37 121.36	37 121.36
Maximum Speed Z Axis	[m/min] [ft/min]	8,5 27.88	6 19.68
Water Clean Consumption (3 bar - psi)	[l/min] [gal/min]	15 3.96	15 3.96
Cooling Water Consumption at 3 bar	[l/min] [gal/min]	50 13.21	50 13.21
Air Consumption (6 Bar - psi) (* With Vacuum System) / **ISO CONE 50	[l/min] [gal/min]	25 (*300) / (200-550**) 6.60 (*79.2) / (52.8 - 145.2 **)	25 (*300) / (200-550**) 6.60 (*79.2) / (52.8 - 145.2 **)
Max liftable weight with vacuum system	[kg] [lb]	500 1100	500 1100
Standard Installation Dimensions (Width X Depth X Height)	[mm] [in]	8190 x 5520 x 4850 [322.4"] x [217.32"] x [190.94"]	8470 x 7960 x 4690 [312.9"] x [210.6"] x [184.6"]
Total machine mass (without steel wall and table)	[kg] [lb]	5580 12276	8050 17710
Machine packing dimension	[m] [ft]	12.03 40' O.T. container	12.03 40' O.T. container
Time to rotate head 90° (W axis)	[s]	1,5	1,5

The detected sound pressure levels are measured under cutting, milling and boring conditions and may vary according to the machined material, tooling and working parameters. Measurements are carried out in accordance with **UNI EN 16564:2015 and UNI EN ISO 11202:2010**, with a measurement uncertainty of **K = 3.2 dB(A)**. The machine operates with a weighted sound pressure level **LpA of 82 dB(A)** at the control station, with maximum values up to **90 dB(A)** at other workstations; the indicated values are emission levels and do not necessarily represent safe operating levels.



Overall dimensions





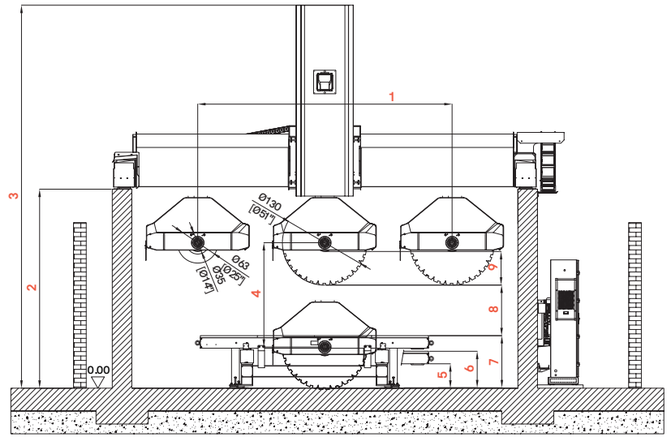
The drawing refers to an example configuration (z axis 1000 mm / beams length 4110 mm) and is valid only for commercial purpose.
Do not use for foundations and general machine supply constructions.

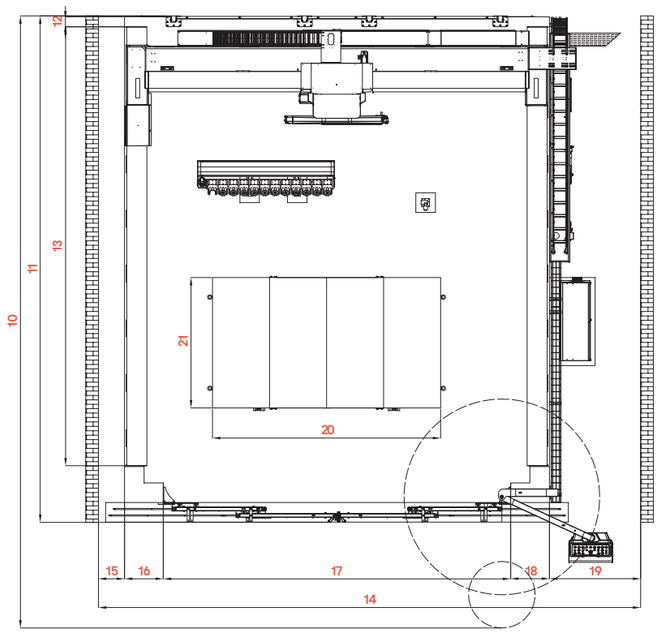
Version L5

1	[mm]	3860
	[in]	152
2	[mm]	2770
	[in]	109
3	[mm]	4850
	[in]	191
4	[mm]	1000
	[in]	39
5	[mm]	360
	[in]	14
6	[mm]	560
	[in]	22
7	[mm]	800
	[in]	31

8	[mm]	530
	[in]	21
9	[mm]	520
	[in]	20
10	[mm]	7110
	[in]	280
11	[mm]	5520
	[in]	217
12	[mm]	210
	[in]	8
13	[mm]	4110
	[in]	162
14	[mm]	8190
	[in]	323

15	[mm]	500
	[in]	20
16	[mm]	480
	[in]	19
17	[mm]	5330
	[in]	210
18	[mm]	480
	[in]	19
19	[mm]	1400
	[in]	55
20	[mm]	3500
	[in]	138
21	[mm]	2000
	[in]	79





The drawing refers to an example configuration (z axis 1600 / beams length 6700 mm) and is valid only for commercial purpose.
Do not use for foundations and general machine supply constructions.

Version Z5

1	[mm]	3900
	[in]	154
2	[mm]	3050
	[in]	120
3	[mm]	5870
	[in]	231
4	[mm]	1600
	[in]	63
5	[mm]	360
	[in]	14
6	[mm]	560
	[in]	22
7	[mm]	800
	[in]	31

8	[mm]	780
	[in]	31
9	[mm]	520
	[in]	20
10	[mm]	9390
	[in]	370
11	[mm]	7770
	[in]	306
12	[mm]	150
	[in]	6
13	[mm]	6700
	[in]	264
14	[mm]	8320
	[in]	328

15	[mm]	400
	[in]	16
16	[mm]	600
	[in]	23
17	[mm]	5330
	[in]	210
18	[mm]	600
	[in]	23
19	[mm]	1400
	[in]	55
20	[mm]	3500
	[in]	138
21	[mm]	2000
	[in]	79

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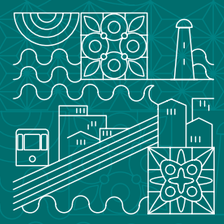
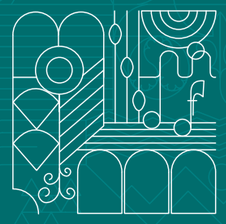
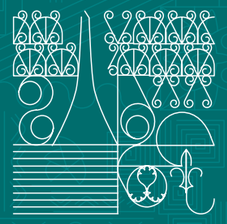


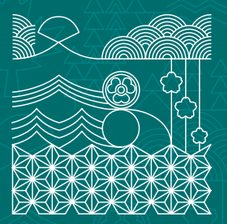
Portugal | **Porto**



Italy | **Pesaro**



France | **Lyon**



Japan | **Osaka**

Australia | **Sydney**

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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.

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