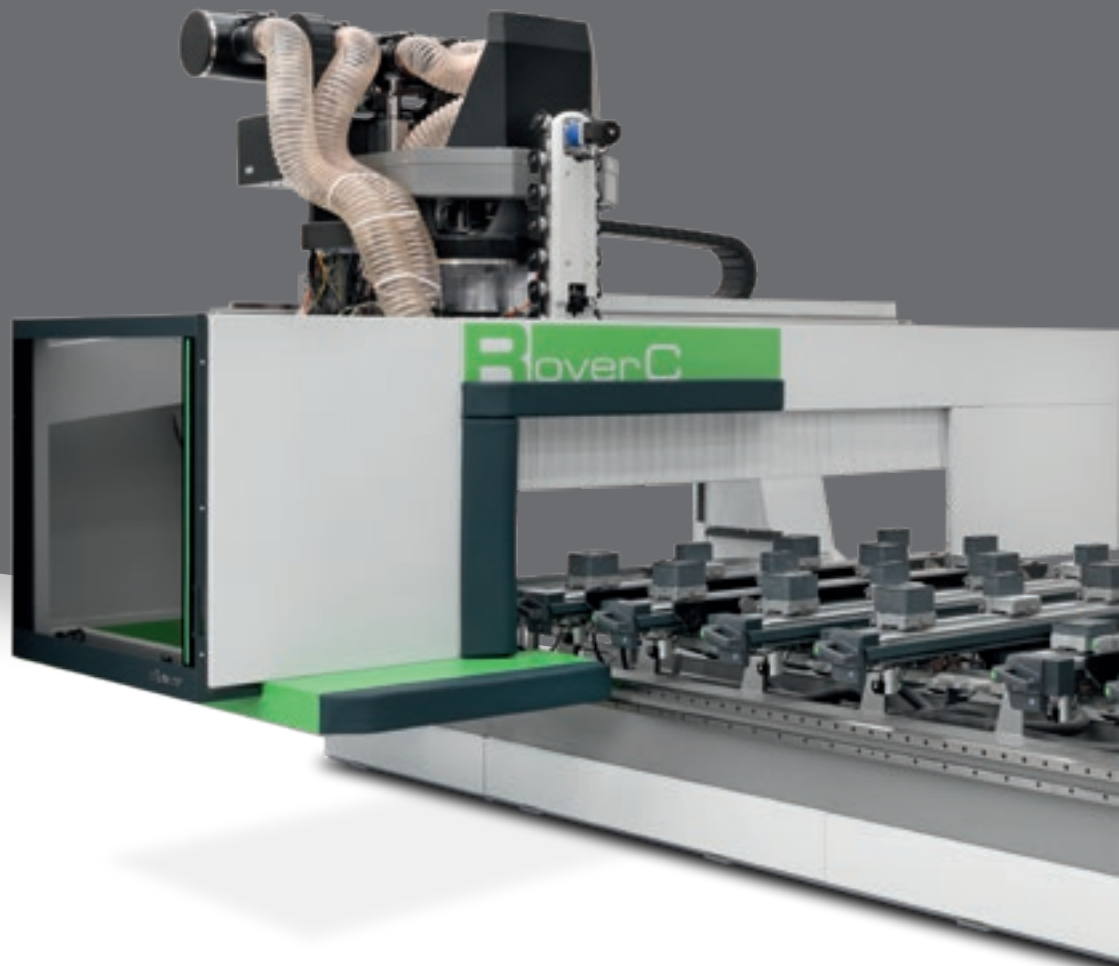


# PRO VER<sub>c</sub>

CNC MACHINING CENTRE



# POWER MEETS PRECISION



## THE MARKET EXPECTS

a change in manufacturing processes that enables companies to **accept the largest possible number of orders**. This is coupled with the need to maintain high quality standards **while offering product customization** with quick and defined delivery times, as well as responding to the needs of highly creative designers.

## BIESSE MEETS

with technological solutions that highlight and support technical expertise as well as process and material knowledge.

**Rover C** is the new CNC machining centre for manufacturing furniture, staircase and door and window components of any shape, size and thickness with ease. It was designed to be used for heavy-duty processing that requires large-size tools and aggregates.



# ROVER<sub>c</sub>

- ✓ UNIQUE TECHNOLOGICAL SOLUTIONS FOR OPTIMAL PERFORMANCE
- ✓ CUSTOMISABLE CONFIGURATIONS FOR THE WIDEST RANGE OF PRODUCTION NEEDS
- ✓ COMPLETE MACHINABILITY OF THICK COMPONENTS, TRANSIT IN Z OF PIECES UP TO 500 MM
- ✓ RELIABLE TECHNOLOGY, WITH NO COMPROMISES



# PRODUCING WITHOUT LIMITS

The technology of the new Rover C supports the machining of complex-shaped pieces, guaranteeing quality, precision and absolute reliability over time.

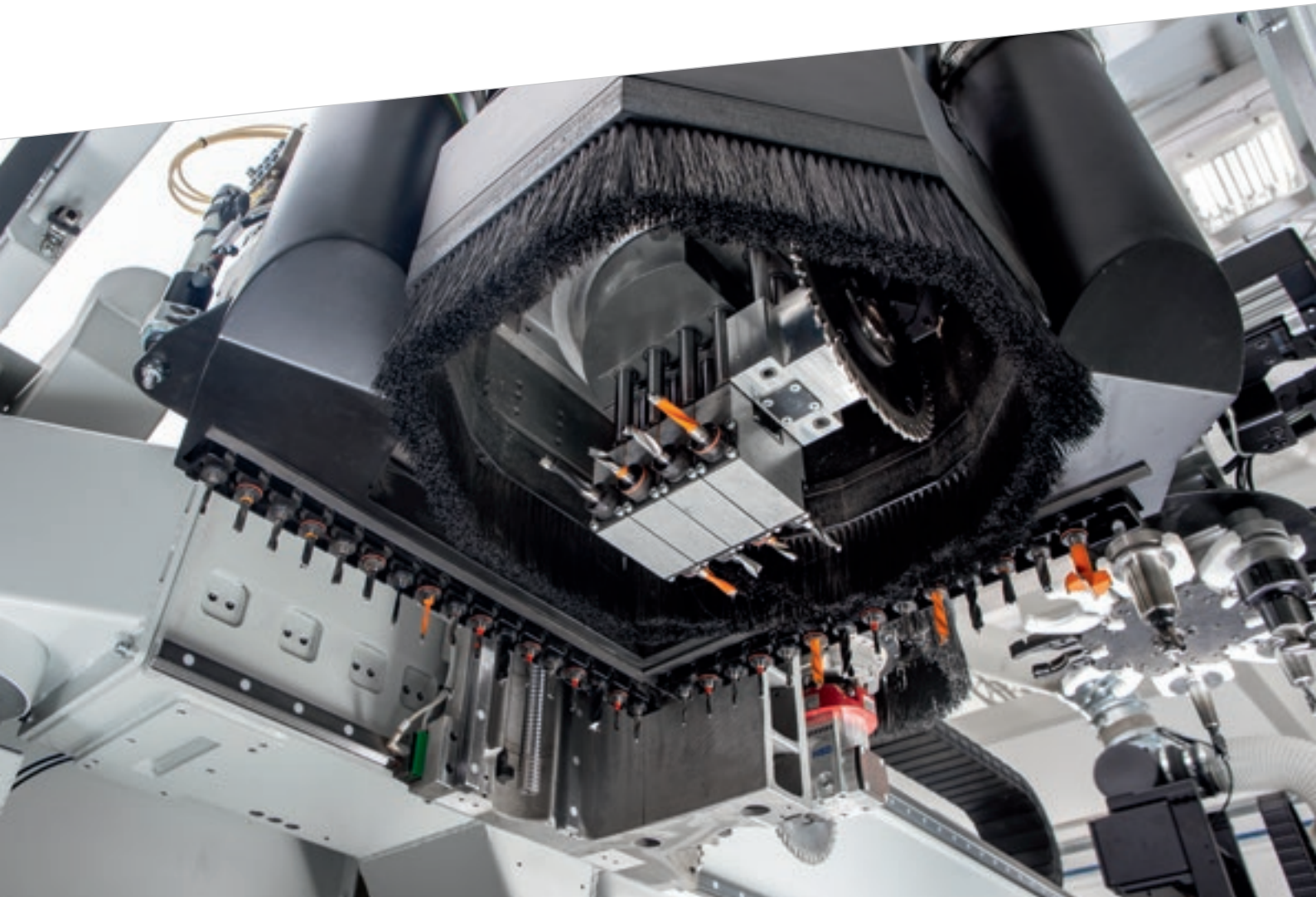


**TECHNOLOGY BASED  
ON 5 INTERPOLATING AXES  
WITH CONTINUOUS ROTATION**





# RELIABLE TECHNOLOGY, WITH NO COMPROMISES



The BHC 42 boring units, with 28 mm diameter spindles, is liquid-cooled and automatically lubricated to ensure quick, precise boring operations with a high finishing quality and optimum reliability. The TCH9L NC working unit, that completes the BHC 42, can be rotated 360° for horizontal boring operations, channels and blade cuts orientated in any direction.

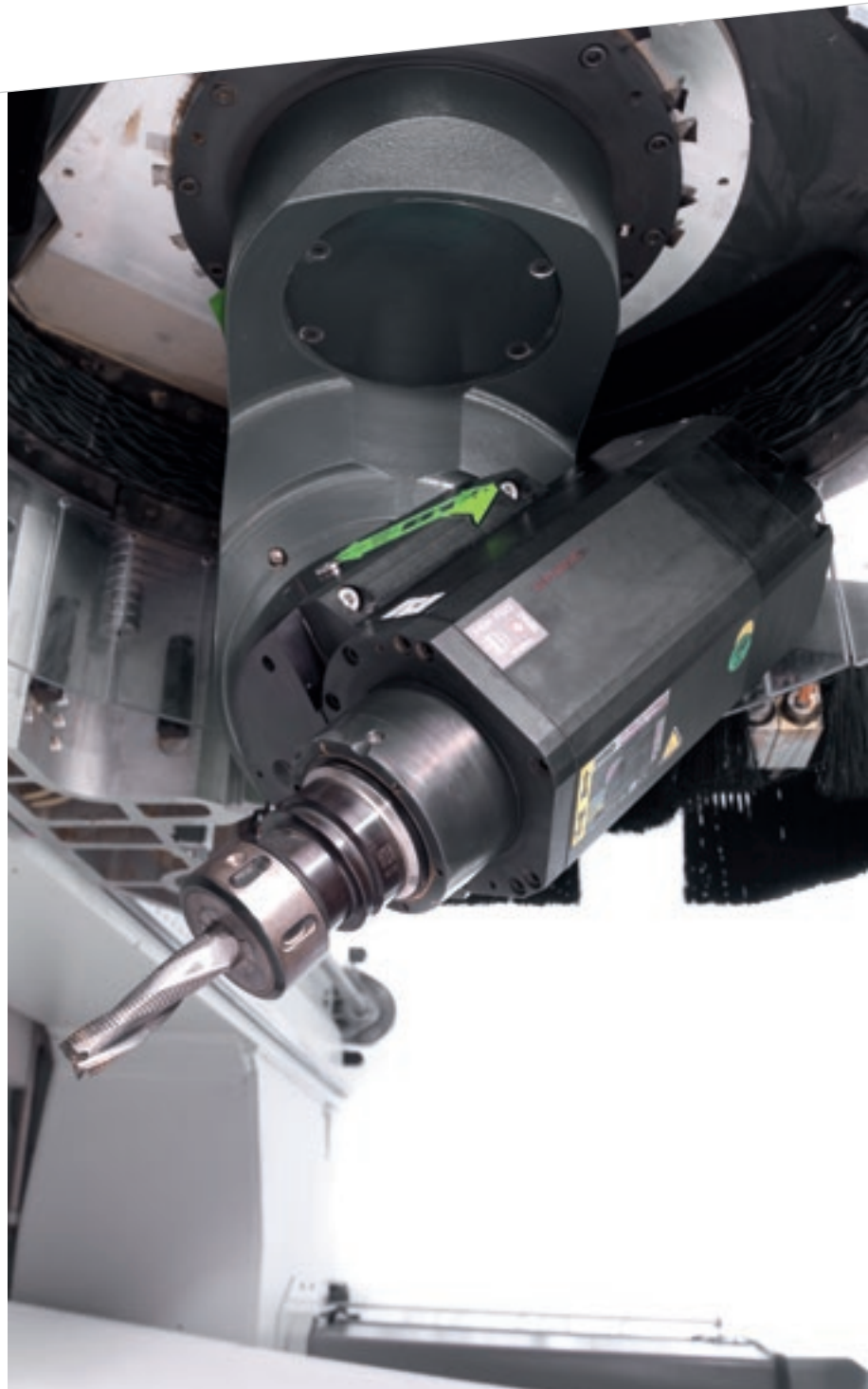


Grease pump on the X carriage for the automatic lubrication of the boring unit, without any operator intervention or machine stoppage.

The milling and boring units and the aggregates are designed and made for Biesse by HSD, a world leader in this sector. They guarantee top power, compact dimensions and excellent finishing standards.



The **C Torque axis** has no gears so it's very rigid and ensures fast positioning, as well as being a highly precise technical solution because it's not subject to wear.

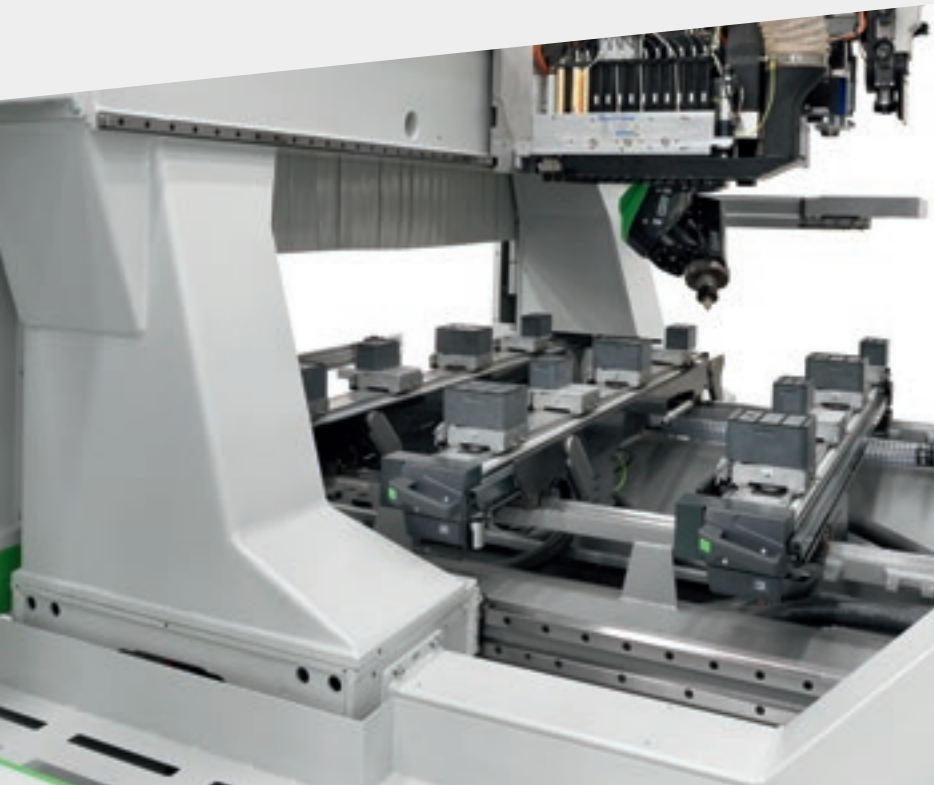


Operating section with 5 interpolating axes (21.5 kW at 8,000 rpm), the most powerful on the market, for complex machining operations with top quality and precision.



# PERFECT EXECUTION OF MACHINING OPERATIONS

Total lack of vibration thanks to the extremely solid and well-balanced gantry structure with twin motors, designed to enhance precision and reliability standards during machining operations.



**Automated lubrication** ensures the continuous lubrication of the machine's main moving parts without the need for operator intervention.



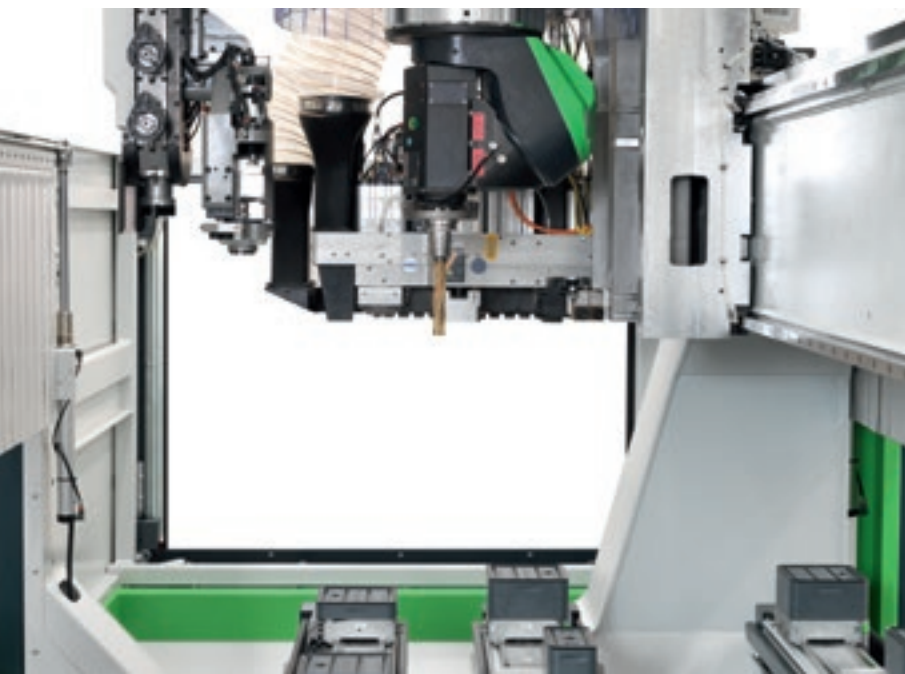


# COMPLETE MACHINABILITY OF THICK COMPONENTS, TRANSIT IN Z OF PIECES UP TO 500 MM

The outstanding rigidity of the structure enables machining operations on pieces with X/Y/Z measurements up to 1950x8125x500 mm (up to 2250x8125x500 mm as an option), with optimum precision and finishing quality.



Transit of pieces up to 500 mm



The working fields are covered by all the tools. This makes the Rover C extremely flexible and able to guarantee excellent efficiency and ergonomics.

# HIGH TECHNO LOGY

## EXTREME POWER

**Unique technological solutions to meet productivity and flexibility requirements of the most demanding manufacturers.**

The HSD operating section with 5 interpolating axes, with 21.5 kW power at 8,000 rpm and 360° continuous rotation on the vertical and horizontal axes, can machine complex shapes whilst ensuring quality, precision and 100% long-term reliability. The 5-axis and 4-axis milling units on independent Y carriages enable the flexible production of any type of element, plus tool change operations that don't affect cycle times. High axis speed and quick acceleration ensure optimum productivity

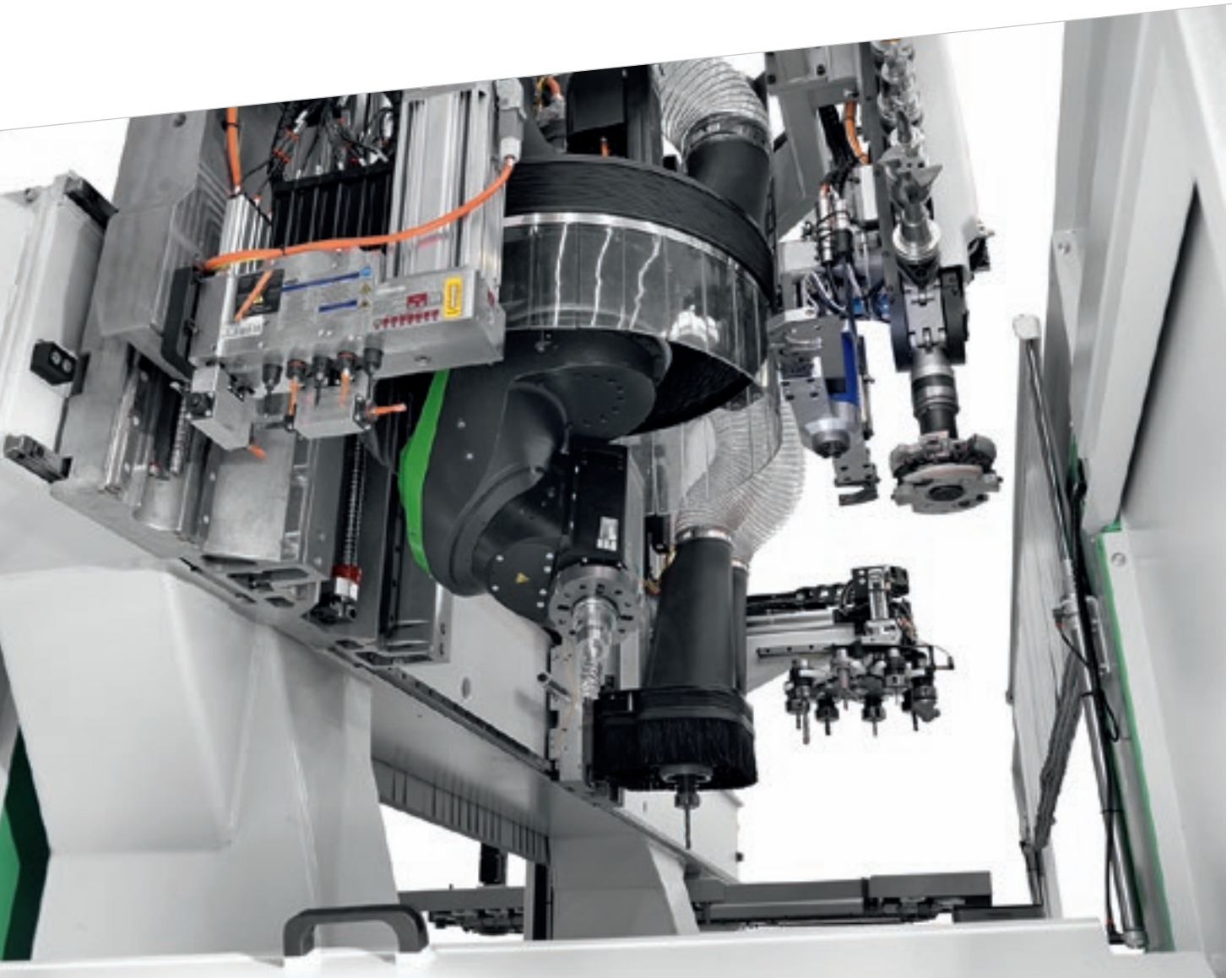






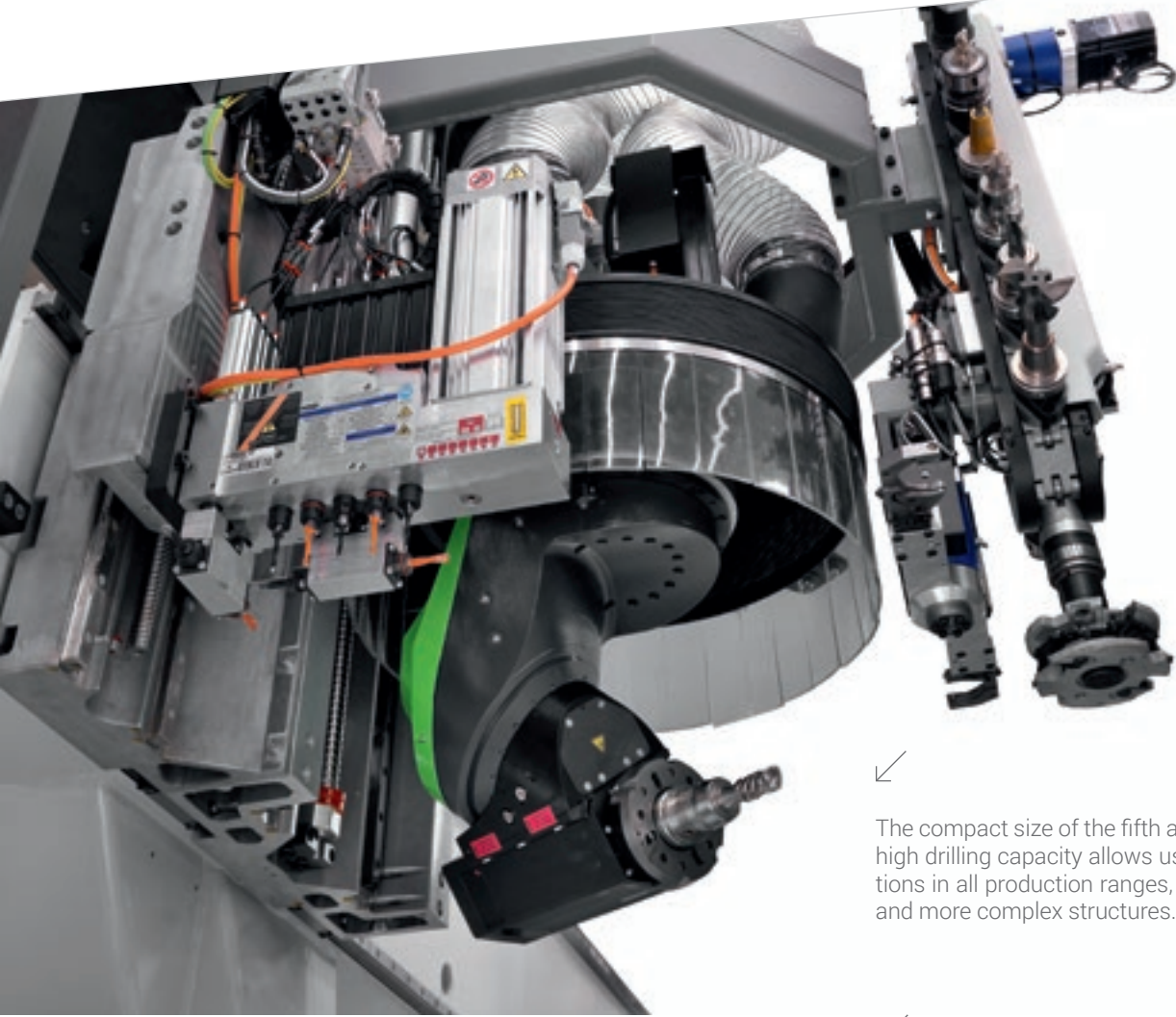
# CUSTOMISABLE ACCORDING TO REQUIREMENTS

The Rover C can be configured to meet a wide variety of market requests and create specific solutions for the needs of each individual customer.



The possibility to configure the machine with two independent Y carriages - one with a 5-axis milling unit and a borer, and the other with a 4-axis milling unit - maximises production while still ensuring optimum flexibility.

# AXES VECTOR SPEED FROM 124 TO 156 M/MIN AND ACCELERATION FROM 3.5 TO 5 M/SEC<sup>2</sup> FOR HIGH PRODUCTIVITY



The compact size of the fifth axis combined with the high drilling capacity allows users to perform operations in all production ranges, for processing simple and more complex structures.



## CONFIGURATION FOR HARDWARE WITH INDEPENDENT Y CARRIAGES, FOR TOOL CHANGES WHILE THE MACHINE IS RUNNING

The rear Y carriage is tooled with a 5-axis head that already offers 21.5 kW power at 8,000 rpm. The front Y carriage is tooled with 4 units, each fitted with an independent motor and designed for continuous 360° rotation:

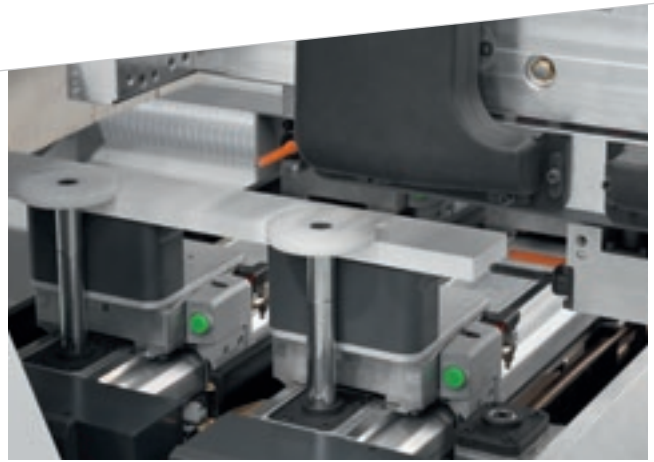
- ▀ aggregate with 3+1 opposed tools for horizontal boring for the joint,
- ▀ aggregate with blade (diameter 300 mm) for edge trimming,
- ▀ horizontal milling aggregate with 2 outlets (one for a blade) for strip recovery,
- ▀ tilting unit with 2 outlets for tilted milling and boring, with NC positioning.



# SIMPLE, QUICK AND SAFE TOOLING OF THE WORKING AREA



Locking systems based on a vacuum.



Easyclamp locking system for machining narrow pieces.



Uniclamp and Hyperclamp pneumatic locking systems with quick release, for firm and precise locking.





The working area guarantees the locking of pieces of any shape or size. The tooling of the working area is simple and quick.



**Easy Zone**

Supplementary vacuum system for the quick and easy clamping of several elements on the machine.

**Multi-area**

Allows several elements to be locked in a simple, fast manner using a vacuum or Uniclamps and Hyperclamps.

**Activation of locking systems**

Thanks to a line of photocells on the front side of the base, the locking systems can be activated from any point on the machine.



Lifters to assist with loading large and/or heavy pieces. Made of aluminium, each is equipped with two cylinders with sensors. Vertical descent occurs at low pressure.

# DIFFERENT POSITIONING SYSTEMS IN THE WORKING AREA, TO SUIT EACH INDIVIDUAL PROCESS



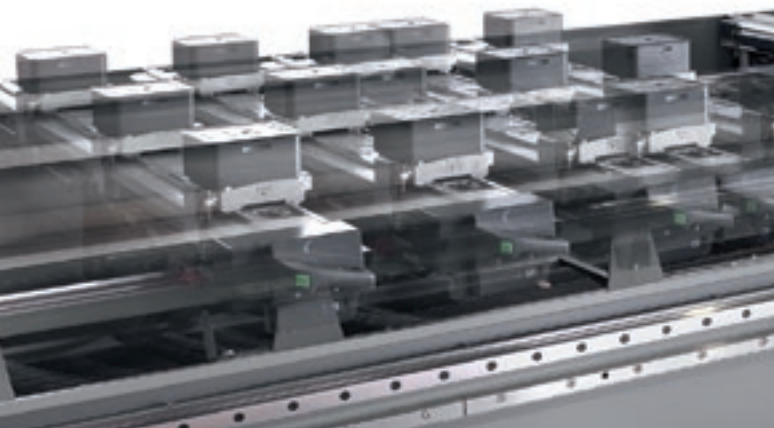
## **ATS (Advanced Table-Setting System)**

For the quick and easy manual positioning of the clamping systems.



## **SA (Set Up Assistance)**

For the quick, easy and controlled manual positioning of the clamping systems. The linear sensors in the work table, along with the collision control function, reduce the risk of collisions.



## **EPS (Electronic Positioning System)**

For the quick, automatic positioning of the clamping systems in the programmed positions. The motors, along with the collision control function, ensure controlled positioning movements to reduce the risk of collisions.

## **FPS (Feedback positioning system)**

Evolution of EPS, with unique linear sensors that ensure extremely precise locking system positioning and can tell you those positions at any moment, even after manual interventions by the operator. The Self Learning function allows the manual positioning points of the vacuum modules and pneumatic locking clamps to be automatically stored in the program by means of a simple command.



## XPS POSITIONING SPEED AND PRECISION



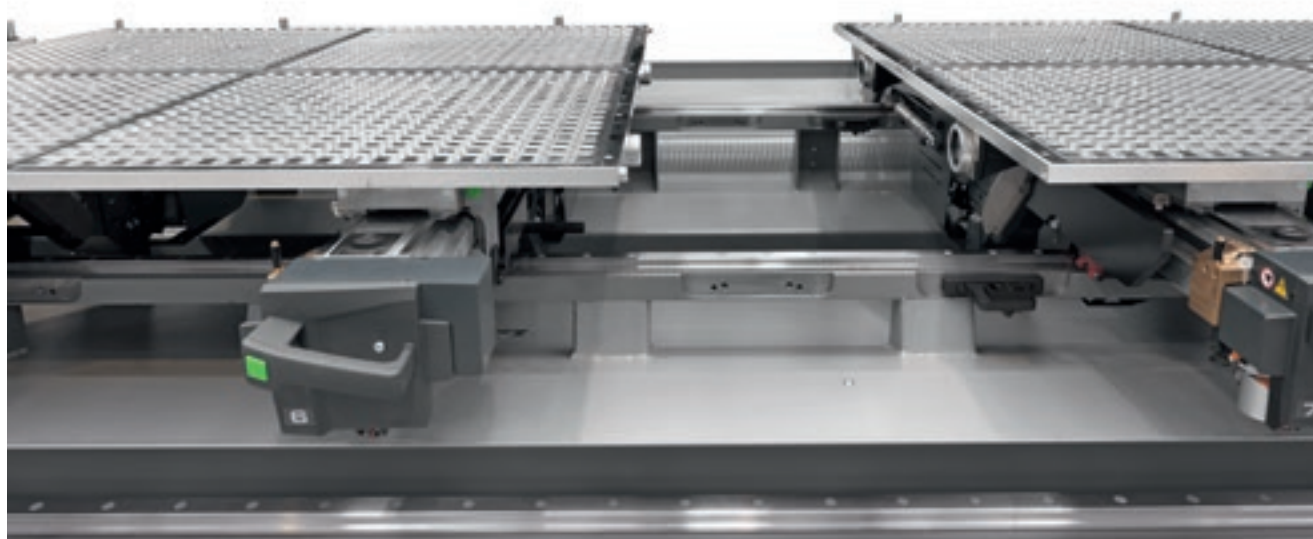
XPS is the first solution on the market for the best results in terms of positioning speed and precision. Fitted with a motor for every work table and every carriage, it enables the simultaneous positioning of all the locking systems. XPS not only positions the vacuum modules and pneumatic locking clamps, but also helps the operator in the loading phases and moves the pieces during program execution without any need for the operator to intervene manually. The MULTI-ZONE system (fitted as standard) enables the creation of up to 16 fully independent locking areas.



# CFT: TWO MACHINES IN ONE, COMPETITIVENESS GUARANTEED

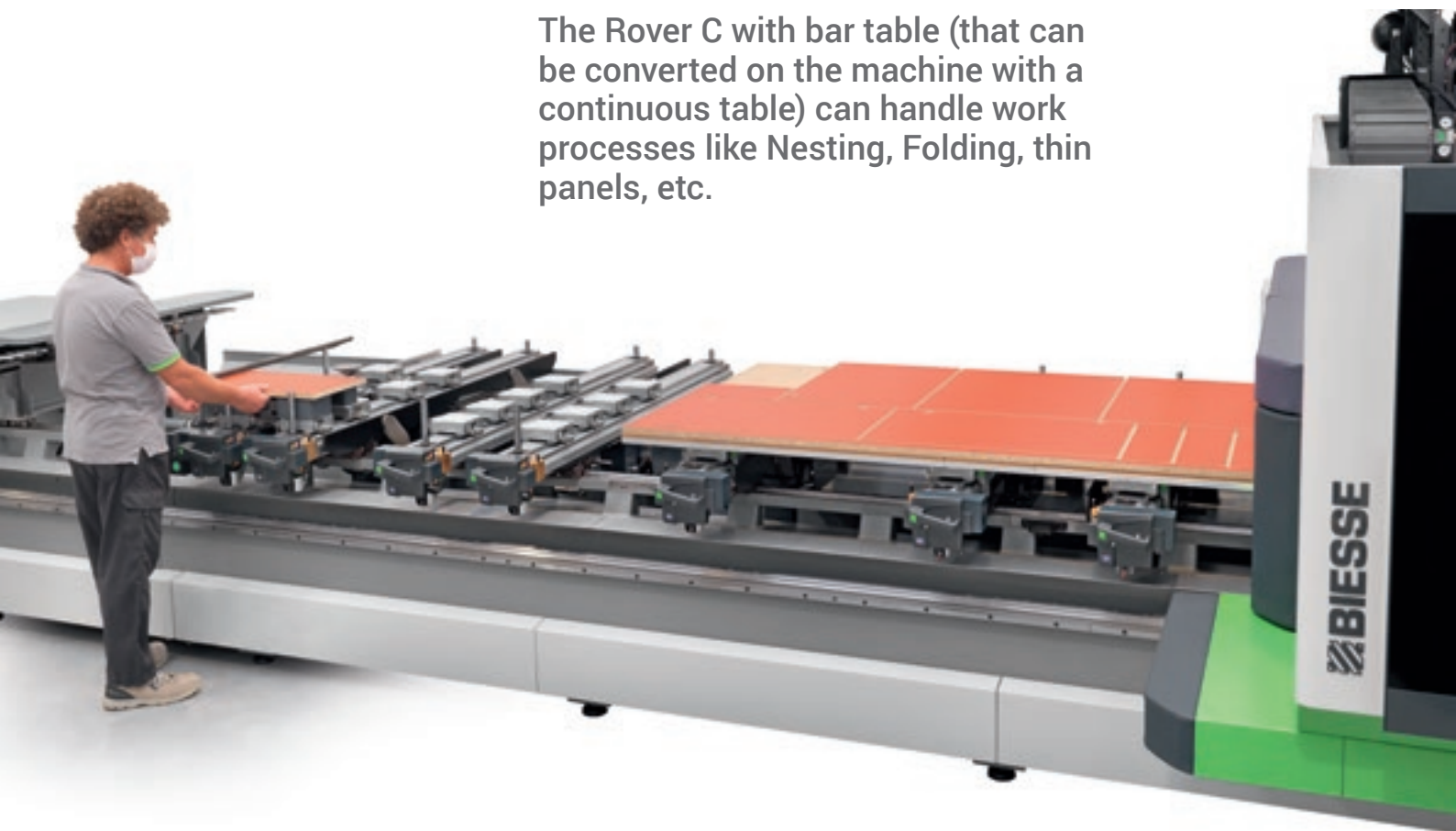


The new CFT system designed by Biesse makes the machine extremely flexible, so any type of job order can be processed.



Passing from a machine with bar table to one with a continuous table is quick and easy thanks to the quick connection CFT modules.

The Rover C with bar table (that can be converted on the machine with a continuous table) can handle work processes like Nesting, Folding, thin panels, etc.



Sectioning in nesting mode produces customised, squared pieces from a large panel. The individual pieces can be completed in the opposite working area, with all those machining operations that can't be carried out on the continuous work table (horizontal bores, undercut operations, etc.).

In the case of a work table with numerical control positioning, the vacuum modules and bar tables are positioned automatically, without the need for any manual intervention by the operator.



SOLUTIONS THAT MAKE THE USE OF OUR MACHINES SIMPLER, MORE ERGONOMIC AND MORE EFFICIENT



## SINGLE CONTROL STATION WITH TWIN MONITORS AND LABELLING MACHINE

The machine can be controlled and labels printed (for piece identification) from a single command point. Solution that greatly enhances the machine ergonomics.

## PRINTER ON THE MOBILE CONSOLE

The printer is connected directly to the machine PC, and positioned so that everything needed for labelling is close to hand.

Biesse has developed a series of solutions that help the operator in the various work phases, making daily tasks easier. myVA is a virtual assistant for every operator.

### WEARABLE BAR CODE AND QR SCANNER

Used to upload programs in the work list, reading the information given on the label and activating the subsequent machining phases.

QR codes or bar codes are read quickly and accurately, leaving the operator's hands free (unlike the classic scanner).

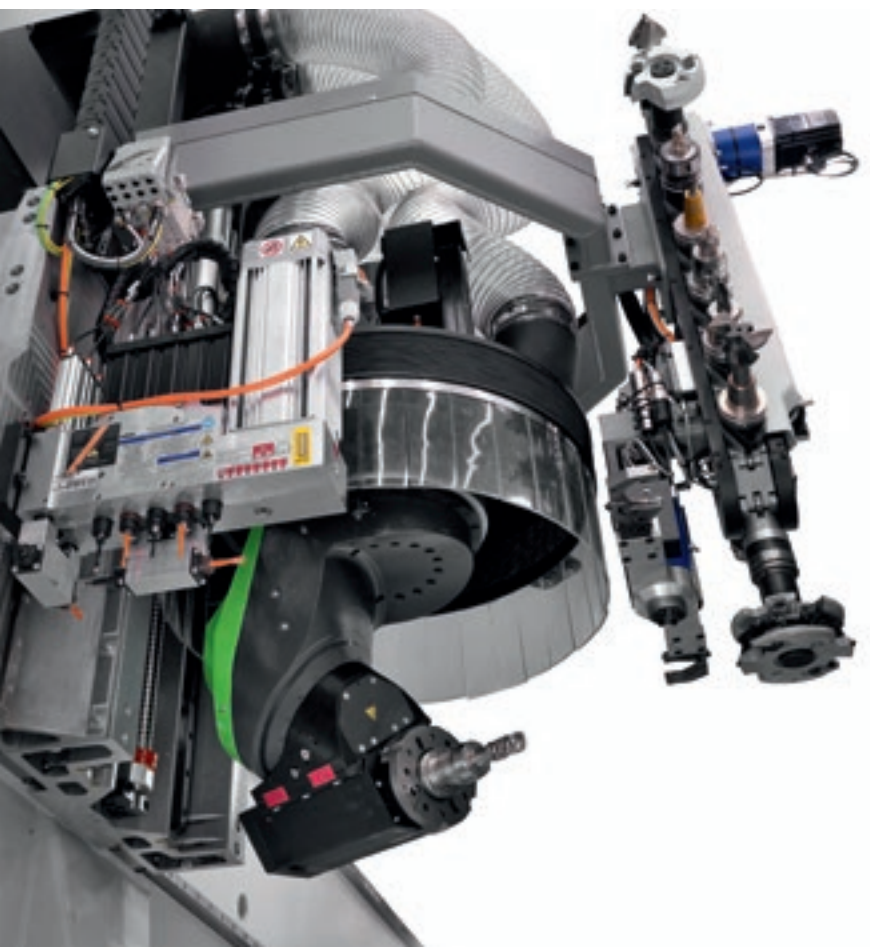




# TOOLING SIMPLICITY AND A MULTITUDE OF TOOLS READY TO HAND



**Double tool magazine** on the X tool carriage with 44-66 positions which guarantee quick tool change and reduced processing times. It can accommodate a saw blade with a diameter of up to 400 mm.



**Vertical chain tool magazine** on Y axis with 10-15 positions.

**Zero tool change set-up time** thanks to new tool change solutions that make over 100 tools always available on the machine.

# CYCLE-TIME REDUCTION FOR HIGH PRODUCTIVITY



Independent Y axis allows tool changes whilst the machine is running, using the largest possible number of tools available in the magazine. The shuttle in the vertical chain magazine speeds up the tool change operation.

**THE SOLUTIONS DEVELOPED FOR ROVER C  
ENABLE QUICK TOOL CHANGES COUPLED  
WITH REDUCED CYCLE TIMES.**



The **Pick Up** station supports automatic tool-holder rack tooling.



# PROTECTION AND SAFETY FOR ALL MACHINING OPERATIONS

Safety and flexibility thanks to the new bumpers combined with photocells with no footprint and dynamic tandem loading.

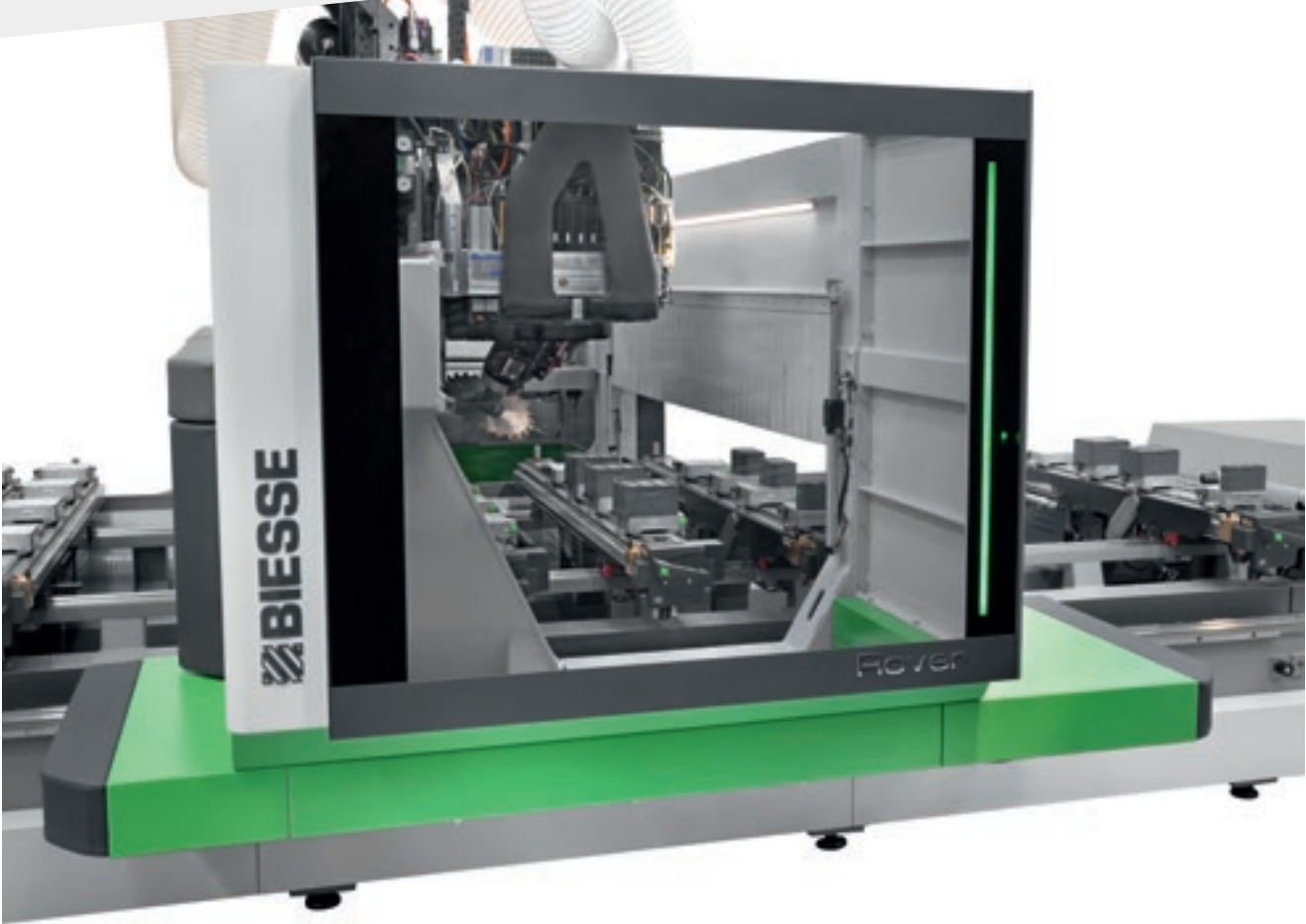


The large openable door facilitates access to the working units for tooling operations.



**Side curtain guards** to protect the working unit, which are movable to enable the machine to work at maximum speed in total safety.

# MAXIMUM VISIBILITY OF MACHINING OPERATION



The internal LED lighting provides excellent visibility, guaranteeing safe working conditions.

LED bar with 5 colours, indicating the machine status in real time, allowing the operator to check the machine status at any point.

## TECHNOLOGY AT THE SERVICE OF THE USER

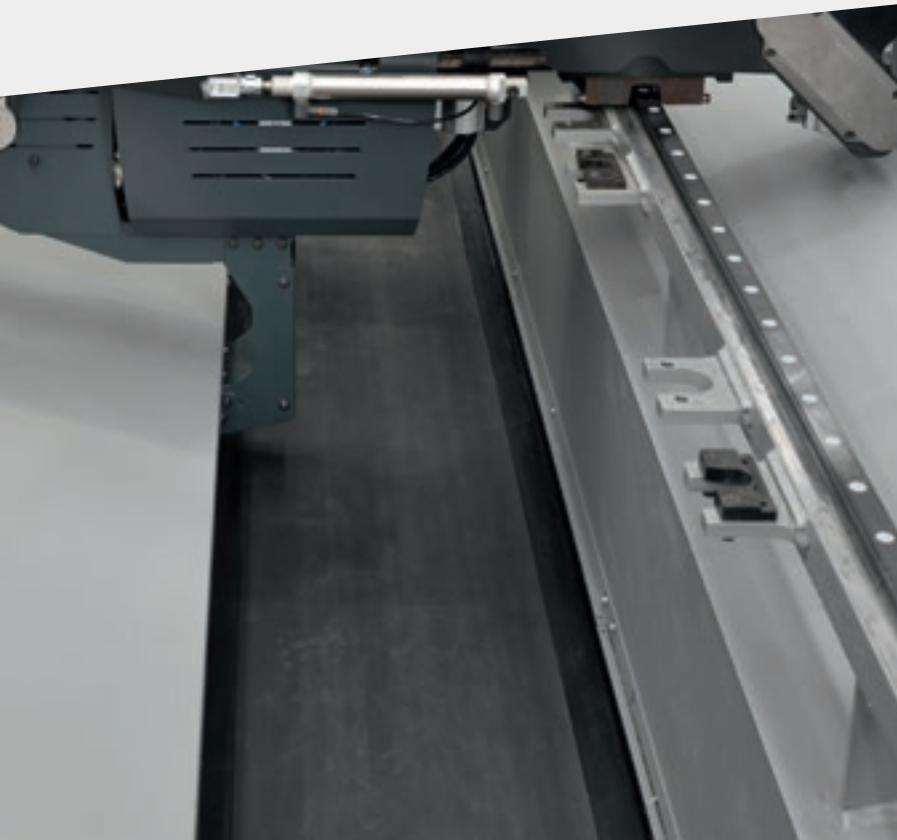


New console with Windows real-time operating system and B\_SOLID software interface, including anti-collision system.





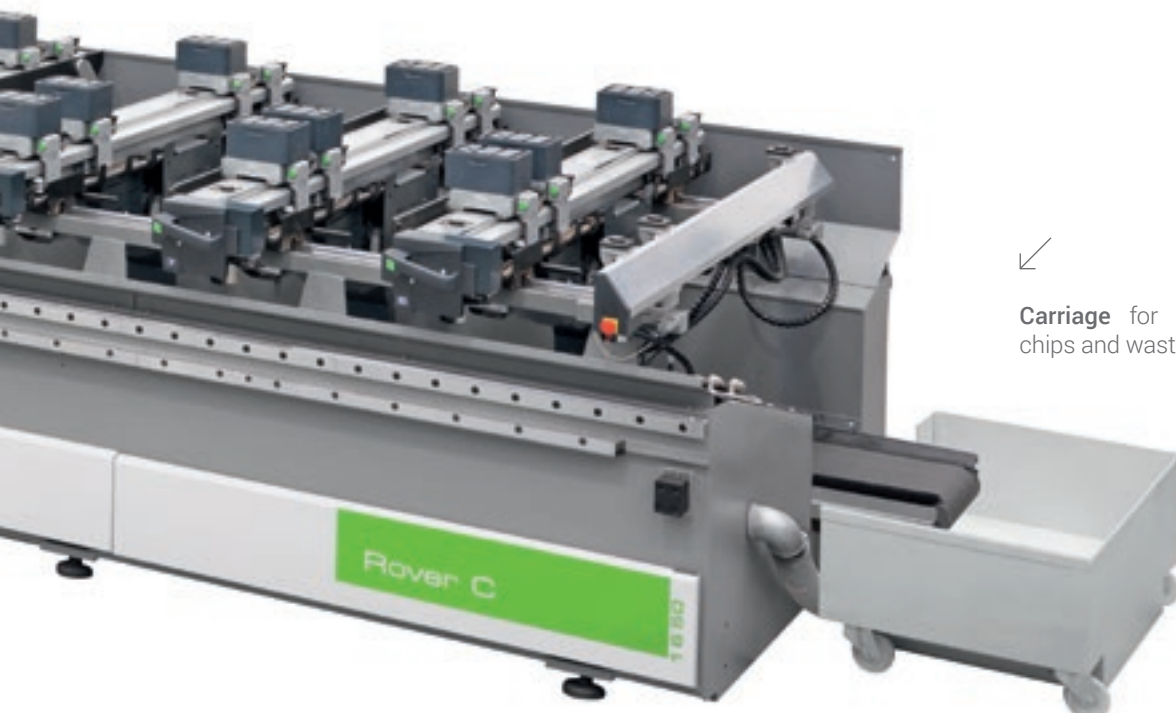
# EFFICIENT SOLUTIONS FOR A FLAWLESS FACTORY



The Rover C has various optional solutions for automatically cleaning both the panel and the area around the machine, saving time for the operator.



**Motorised conveyor belt** for the removal of chips and waste. Worktops with hidden connections to provide excellent chip evacuation capacity.



**Carriage** for collecting and removing chips and waste.

# REDUCED CLEANING TIMES TO ENSURE MAXIMUM PRODUCTIVITY



**Forced flow deflector** with a built-in blower that increases the movement speed of the chips inside the deflector, for better machine cleaning results.



**Multi-step 12-position** suction hood with automatic positioning via the program, or with **continuous numerical control positioning** (for milling units with 3/4 axes).



**Multi-step 19-position** suction hood with automatic positioning via the program, or with **continuous numerical control positioning** (for milling units with 5 axes).



# THE MOST ADVANCED TECHNOLOGY CLOSE AT HAND

bTouch is an optional feature that can be purchased after purchase of the machine to enhance the functionality and the usage of the technology available.



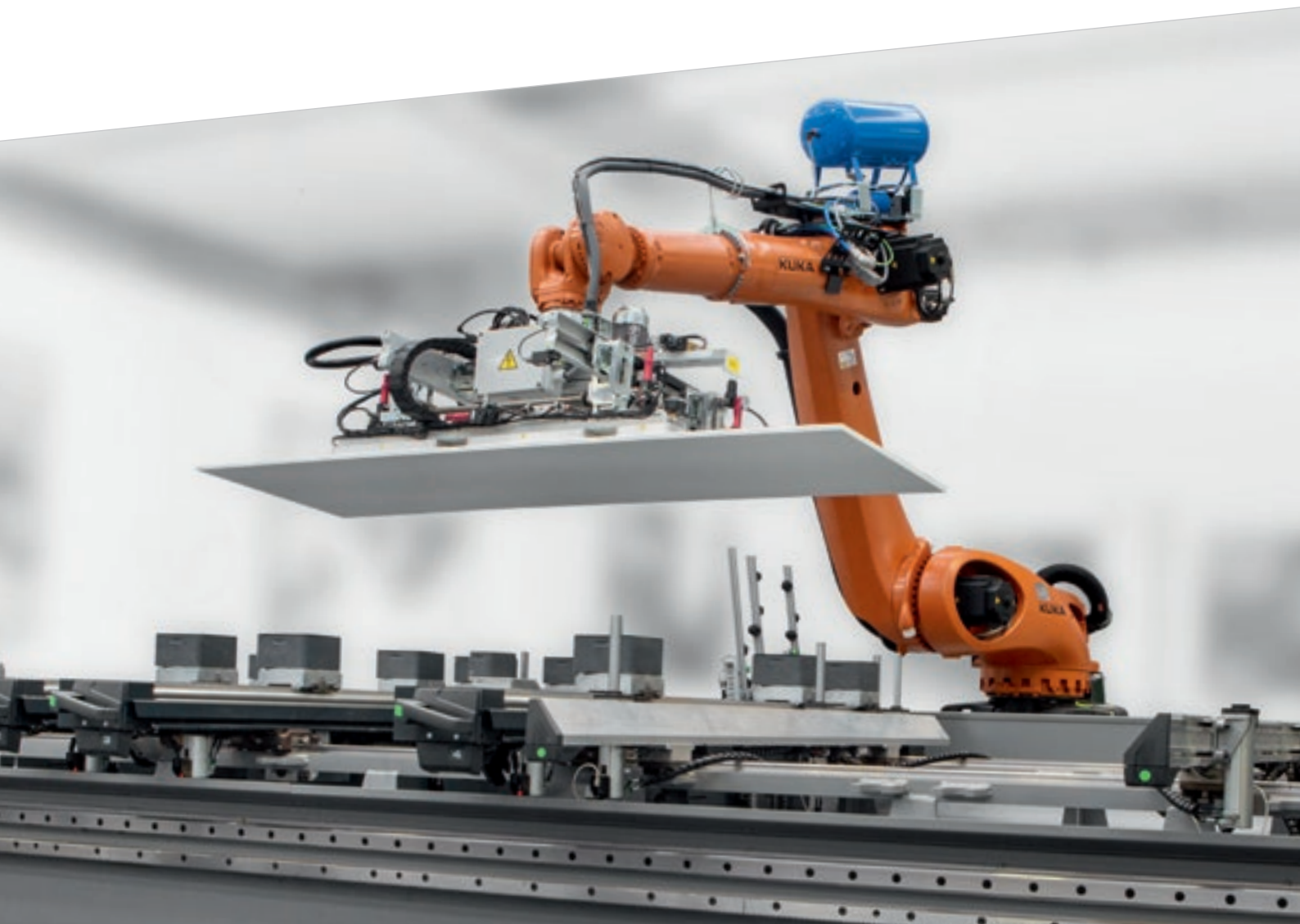
**bTouch is the new 21.5" touch screen which enables you to carry out all of the functions previously performed using the mouse and the keyboard, enhancing the direct interaction between the user and the device.**

Perfectly integrated with the B\_SUITE 3.0 interface (and with later versions) and optimised for touch, this solution is incredibly simple, and makes the best possible use of the Biesse software functions installed on the machine. The screen has a maximum resolution of 1920 x 1080 (Full HD) at 60 Hz.

Specifically, you can:

- ✔ Create any CAD programme (including parametric programmes), with layouts and machining operations
- ✔ Move, rotate and increase the size of objects (panel, NC machine, tool etc.) present within the CAD/CAM area
- ✔ Quickly and simply complete warehouse tooling, by dragging the tools into their designated places
- ✔ Prepare the machine for the correct positioning of the panel (machine set-up), moving tables and carriages into the desired position
- ✔ Send a programme machining list, change the parameters and send it to the NC machine for processing
- ✔ Manage all the controls present in soft-console

# EFFICIENT PRODUCTION, WITH NO LIMITS



Rover range can be perfectly integrated in a line with robots (ROS) and loading/unloading systems. It's the ideal solution for those who need automated solutions for producing large batches.

## INCREASED PRODUCTIVITY AND REDUCED PRODUCTION COSTS, THANKS TO:

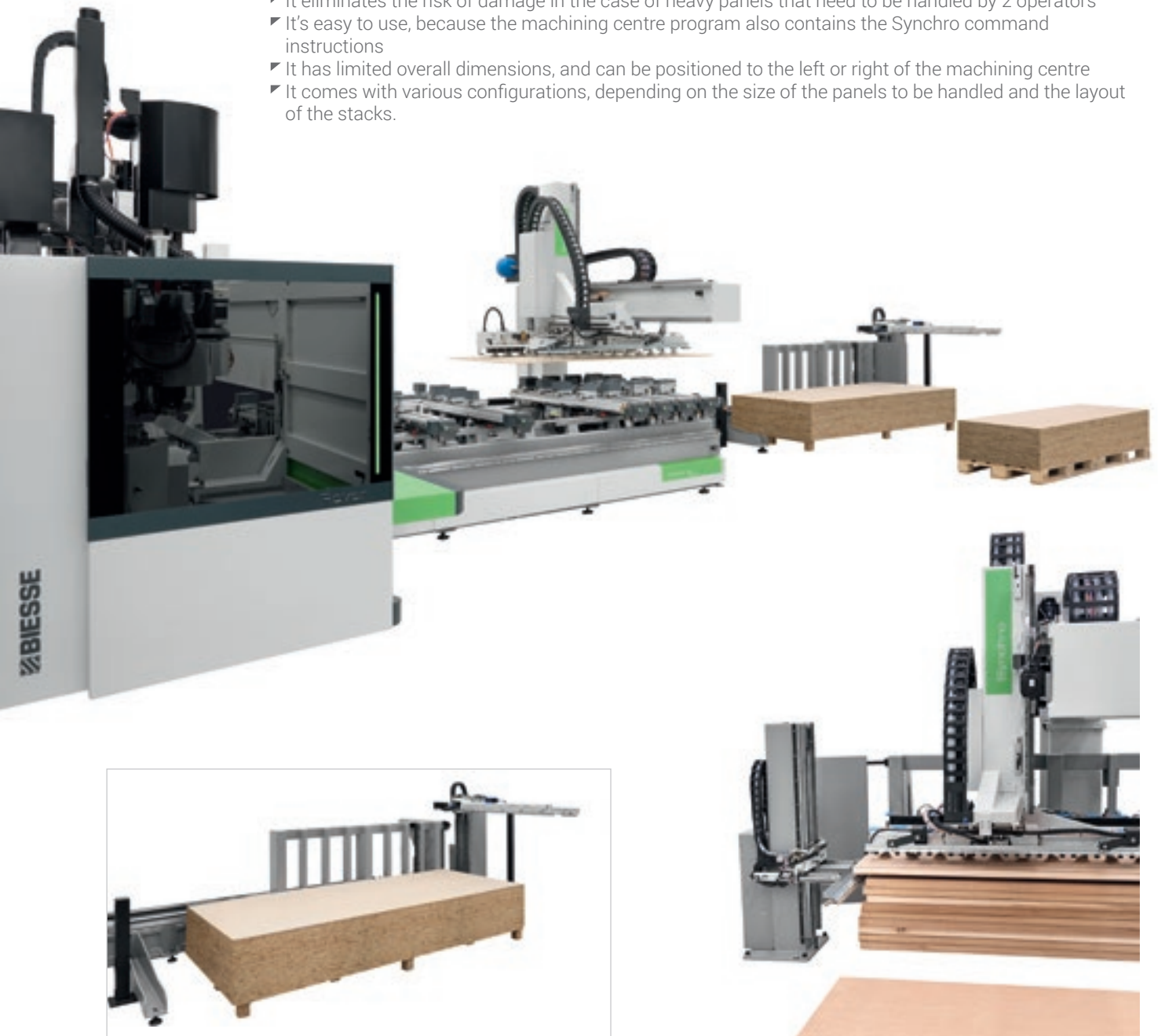
- ✓ The possibility of working with twin stations, with piece loading and unloading while the machine is running
- ✓ Reduced working time for the operator
- ✓ Simplification of work for the operator
- ✓ Machining operations that require no supervision and have no time limits (24/7)



# LOADING AND UNLOADING SOLUTIONS

Synchro is a loading/unloading device that transforms the Rover machining centre into an automatic cell for producing a stack of panels autonomously (without the need for an operator):

- ▶ It eliminates the risk of damage in the case of heavy panels that need to be handled by 2 operators
- ▶ It's easy to use, because the machining centre program also contains the Synchro command instructions
- ▶ It has limited overall dimensions, and can be positioned to the left or right of the machining centre
- ▶ It comes with various configurations, depending on the size of the panels to be handled and the layout of the stacks.



## Mechanical detacher

Increases the reliability and repeatability of the automatic functioning cycle of the cell, compensating for the lack of alignment of the panels in the stack. It consists of a central or lateral mobile stop equipped with blowers to allow for the separation of the panels in the stack.

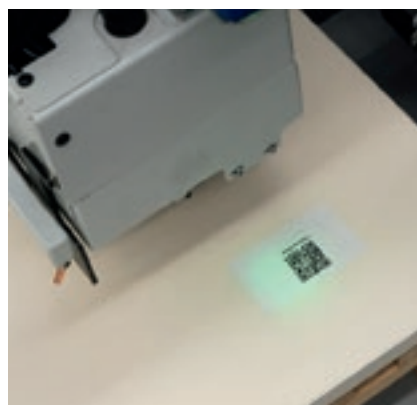
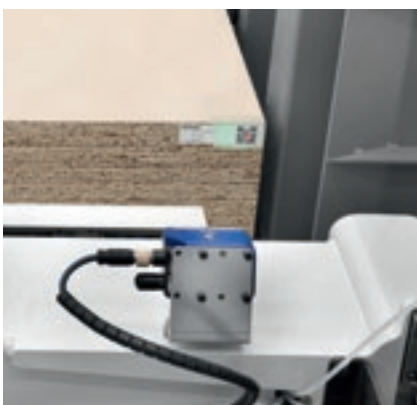
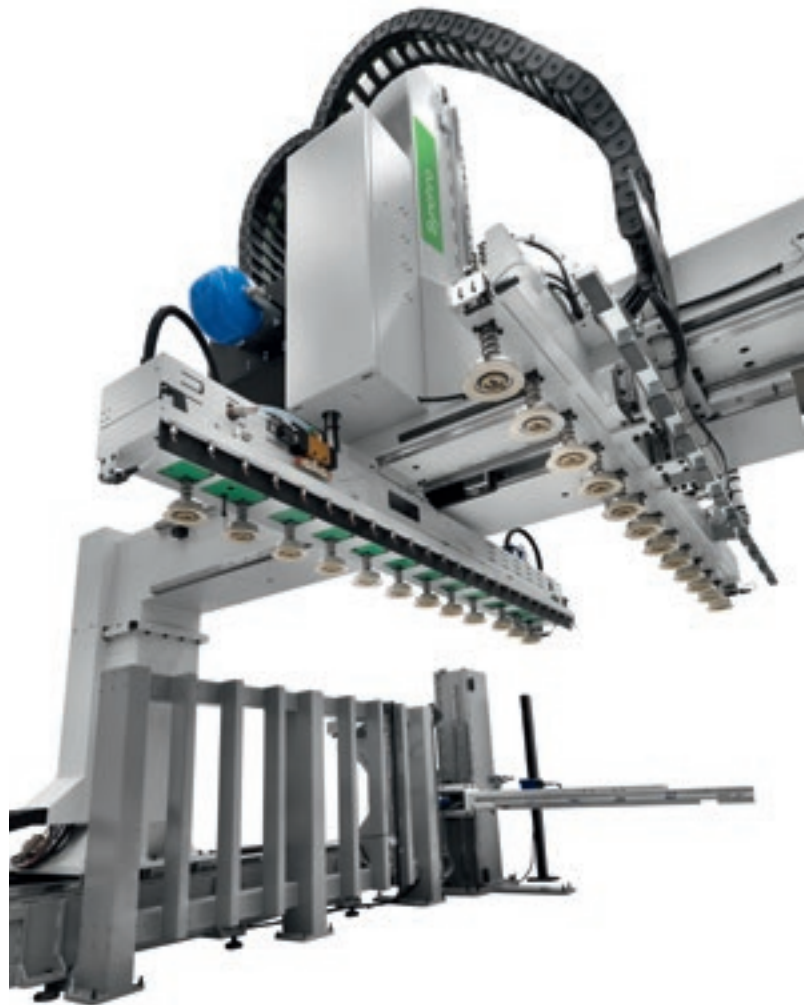
Automated cell for machining a batch of panels or doors.

Synchro can also machine stacks of different-sized panels, thanks to stack reference device and the panel pre-alignment cycle, which is performed while the machine is running, while the Rover machining centre processes the previous panel.

**Panel pick-up device with automatic positioning of the suction cup holder rods**

In accordance with the size of the panel to be picked up:

- No operator intervention is required to attach or remove the suction cup holder rods
- Idle time during format change operations is dramatically reduced
- The risk of collisions caused by incorrect tooling operations is reduced.
- Available in multi-zone mode with independent activation of the suction cups
- The suction cups can be configured with internal blowing to manage porous materials

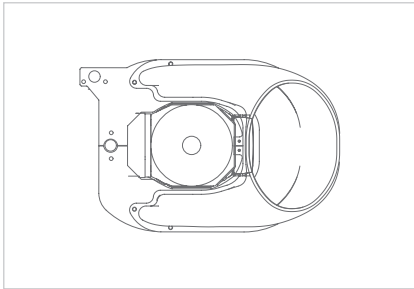


Two types of **bar code readers** are available for reading the bar codes on the top face and on the side face of the panel. These can be used to load the proper machining programme list avoiding operator error.

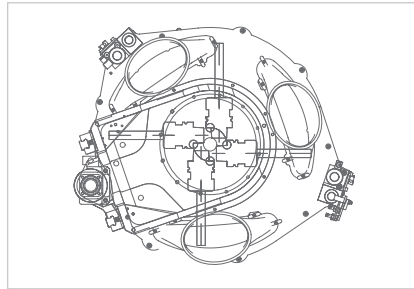
Dedicated configuration for the simultaneous loading/unloading of 2 panels, to maximise machining centre productivity:

- 0 operators
- 1 machining program
- 2 panels

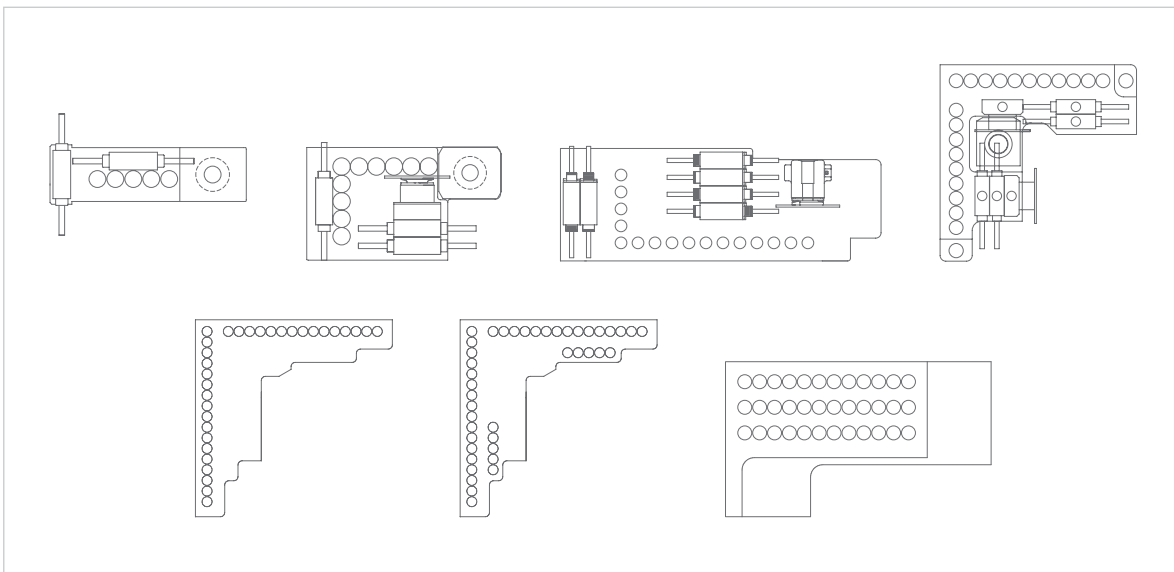
# WORKING UNIT CONFIGURATION



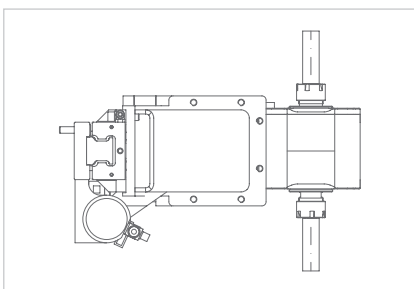
4-axis milling unit with air or liquid cooling and power up to 30 kW.



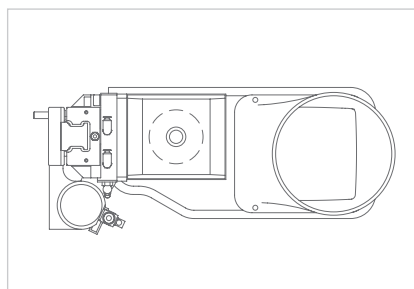
5-axis head with power up to 21.5 kW.



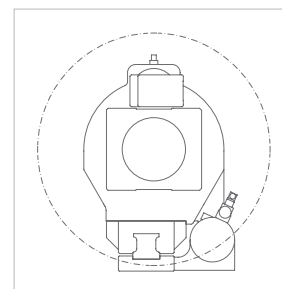
Available boring heads from 9 to 42 positions:  
 BHZ 9 - BHZ 17 L - BHZ 29 L - BHZ 30 2L - BHC 32 - BHC 42 - BHC 36.



2 outlet horizontal milling unit.



6 kW vertical milling unit.



Multi-function, with 360° rotation.



# A COMPLETE RANGE OF AGGREGATES



# EXCEPTIONAL FINISH QUALITY, INCREASED PRODUCTIVITY



Horizontal motor with two outlets for the routing of locks and horizontal machining operations. .

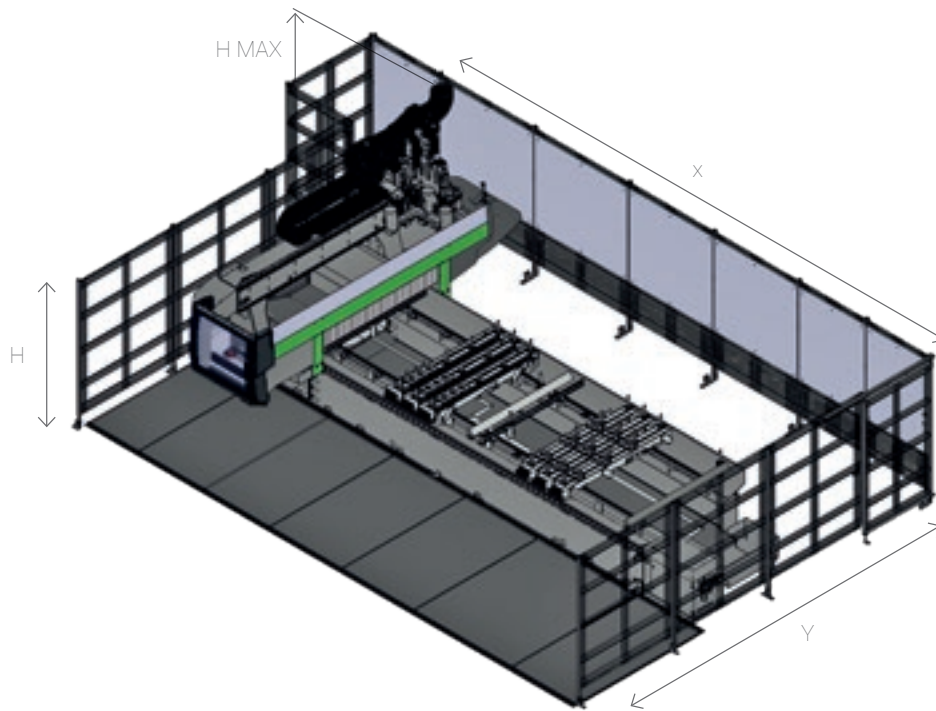


Fixed vertical motor dedicated to additional milling operations (slot, anti-splintering, etc.).



The NC controlled multi-function unit can be infinitely positioned on a 360 (degree) rotation. It can also be used to house aggregates for specific machining operations such as pocketing for locks, hinges, deep horizontal holes and edge-trimming.

# TECHNICAL SPECIFICATIONS



## WORKING FIELDS

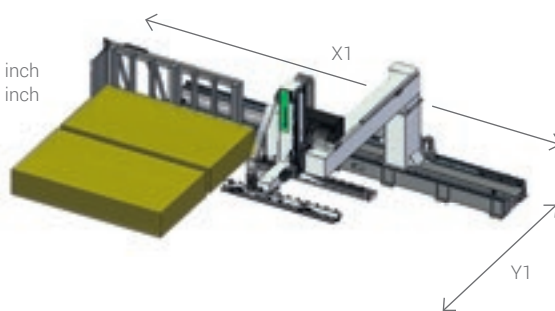
		X	Y	Z
Rover C 1636	mm/inch	3625/143	1650/65	400/16
Rover C 1648	mm/inch	4825/190	1650/65	400/16
Rover C 1665	mm/inch	6505/256	1650/65	400/16
Rover C 1682	mm/inch	8125/320	1650/65	400/16
Rover C 1936	mm/inch	3625/143	1950/77	400/16
Rover C 1948	mm/inch	4825/190	1950/77	400/16
Rover C 1965	mm/inch	6505/256	1950/77	400/16
Rover C 1982	mm/inch	8125/320	1950/77	400/16

Rover C 2250 configuration managed as a special feature.

## OVERALL DIMENSIONS

		X CE mats	Y CE mats	X CE bumper	Y CE bumper	H	H MAX	H MAX
							5 axis	4 axis
<b>Rover C 1636</b>	mm/inch	8121/320	6547/257,7	8361/329	6530/257	2000/79	3370/133	3040/120
<b>Rover C 1648</b>	mm/inch	9334/367	6547/257,7	9574/377	6530/257	2000/79	3370/133	3040/120
<b>Rover C 1665</b>	mm/inch	11027/434	6547/257,7	11267/443	6530/257	2000/79	3370/133	3040/120
<b>Rover C 1682</b>	mm/inch	12720/501	6547/257,7	12930/509	6530/257	2000/79	3370/133	3040/120
<b>Rover C 1936</b>	mm/inch	8121/320	6567/258,5	8361/329	6530/257	2000/79	3370/133	3040/120
<b>Rover C 1948</b>	mm/inch	9334/367	6567/258,5	9574/377	6530/257	2000/79	3370/133	3040/120
<b>Rover C 1965</b>	mm/inch	11027/434	6567/258,5	11267/443	6530/257	2000/79	3370/133	3040/120
<b>Rover C 1982</b>	mm/inch	12720/501	6567/258,5	12930/509	6530/257	2000/79	3370/133	3040/120

H max = 2970 mm / 117 inch  
H fences = 2000 mm / 79 inch



## WORKING FIELDS SYNCHRO

<b>Length (min/max)</b>	mm/inch	400/3200 *- 16/126
<b>Width (min/max)</b>	mm/inch	200/2200 *- 8/87
<b>Thickness (min/max)</b>	mm/inch	8/150 - 0,3/6
<b>Weight (1 panel/2 panels)</b>	kg/lb	150/75 - 331/165
<b>Useful height of stack</b>	mm/inch	1000 - 39
<b>Height of stack from ground (including 145 mm Europallet)</b>	mm/inch	1145 - 45

(\* ) the Min and Max values may vary in accordance with the configurations of Synchro and the Rover machining centre to which Synchro is linked.

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.

Machining an alder piece with a 92 mm height: Weighted surface noise level A (Lp<sub>fA</sub>) 83 dB (A). Superficial weighted noise level A (Lw<sub>A</sub>) 106 dB (A). Machining an MDF piece with a 19 mm height: Weighted surface noise level A (Lp<sub>fA</sub>) 79 dB (A). Uncertainty factor K = 4 dB.

The measurement was carried out in compliance with UNI EN ISO 3746, UNI EN ISO 11202, UNI EN 848-3 and subsequent modifications. 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 further precautions are necessary. The factors determining the noise levels to which the operative personnel are exposed include the length of exposure, the characteristics of the work area, as well as other sources of dust and noise, etc. (i.e. the number of machines and processes concurrently operating in the vicinity). In any case, the information supplied will help the user of the machine to better assess the danger and risks involved.



# HIGH-TECH BECOMES ACCESSIBLE AND INTUITIVE



**B\_SOLID IS A 3D CAD CAM SOFTWARE PROGRAM THAT SUPPORTS THE PERFORMANCE OF ANY MACHINING OPERATION THANKS TO VERTICAL MODULES DESIGNED FOR SPECIFIC MANUFACTURING PROCESSES.**

- Planning in just a few clicks.
- Simulating machining operations to visualise the piece ahead of manufacturing and have some guidance for the planning phase.
- Virtual prototyping of the piece to avoid collisions and ensure optimal machine equipment.
- Machining operation simulation with a calculation of the execution time.



# MANAGING PRODUCTION IN A SIMPLE, USER-FRIENDLY MANNER

**SMART  
CONNECTION**  
Powered by Retuner



**SMARTCONNECTION IS A SOFTWARE PACKAGE FOR MANAGING JOB ORDERS WITHIN THE COMPANY - FROM THE GENERATION PHASE TO SCHEDULING AND ACTUAL PRODUCTION START-UP - IN JUST A FEW SIMPLE, INTUITIVE STEPS.**

**THANKS TO SMARTCONNECTION, THE PRODUCTION SITE MACHINES CAN BE LINKED UP TO TRANSFORM THE COMPANY INTO A 4.0 ENTITY..**



SmartConnection is a web-based solution that can be used by any device.

MANAGE THE JOB ORDER

PLAN

SCHEDULE

WORK

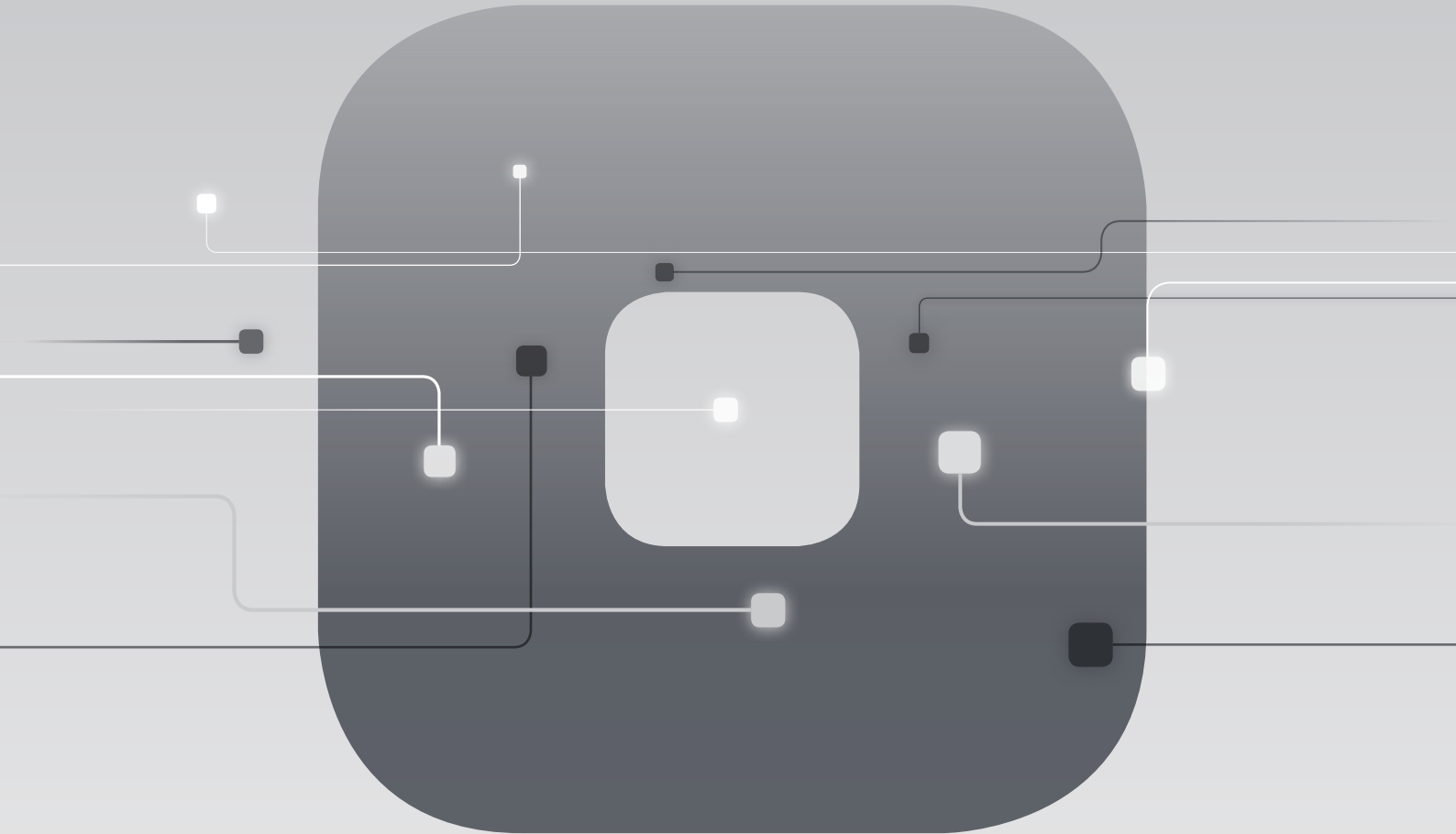


Biesse is extending SmartConnection across all geographical areas.  
To check availability in your country, get in touch with your commercial contact.



# 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



in collaboration with **accenture**

# 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



# MADE WITH BIESSE

## BIESSE TECHNOLOGY PULLS DOUBLE-DUTY AT MCM

**One of the secrets to cost-justifying an investment in flexible, labor-saving technology is finding ways to keep it busy.**

MCM Inc. of Toronto has mastered that trick of the trade. To maximize the return on investment for some of its plethora of CNC machinery, the company has purchased equipment that can be used both to fabricate parts for its custom office and retail environment projects and to manufacture acoustical ceiling panels it produces for another company. Many of the machines pulling double duty on MCM's shop floor sport the Biesse logo. "For our company, this is a great combination because the CNC machining for the acoustical product is fairly simple; it's just a lot of holes," said Gregory Rybak, who founded MCM, short for Millworks Custom Manufacturing, in 2001. "But having this technology greatly helps us with all of the custom work, especially for very intricate shapes and profiles. The acoustical ceiling panels are helping fill up our capacity, which is why we can afford to have all of these machines. If it were just for custom work, we would never be able to buy all of them." MCM has so many Biesse machines that Rybak said even he loses count. He then proceeded to rattle them off resulting in the following list of 11 Biesse machines: Rover C9 5-axis CNC machining center with a combination table; Rover A 5-axis CNC machining center with a combination table; Two Rover B7 flat table CNC nesting routers; Rover G5 flat table machining center; Rover S CNC machining center with a 4x8 flat table; Rover A 1536G CNC

nested-base workcell; Skipper 100 drilling machine, winner of an IWF 2006 Challengers Award; Two Selco beam saws Stream edgebander. Rybak prides MCM's ability to tackle custom retail and office projects most of its competitors can't. In addition to its wealth of woodworking technology, MCM has custom veneer layup capabilities, a 40,000-square-foot metal fabrication shop and a 140-foot-long flat line finishing system. "We truly are a one-stop shop," Rybak said. "We have a lot of processes within our company that most of our competitors do not. We have a full woodshop and a full flat line painting line where we can paint a lot of paneling. Our metal shop is thoroughly sophisticated with CNC lasers, bending machines, and all sorts of welding machines. We also have our own installation crews. When a designer has an idea for a structure that is built in steel, aluminum, solid wood, decorative panels or a combination, we can do it and meet their deadlines." MCM's one-stop-shop approach to servicing customers has served the company well. Over the first 15 years of its existence, MCM has expanded several times and now occupies three buildings totaling 240,000 square feet and employs 250 people. Even working almost around the clock six days a week is not enough to eliminate the need for more space. "We are out the door in our current location," Rybak said. "We are planning on buying another building and having more warehouse space because a lot of our production has to be stored." MCM's newest Biesse machine is a Rov-

er S CNC flat table machining center. It is mainly used in tandem with the Skipper to manufacture acoustical ceiling panels, but also gets pressed into service from time to time to fabricate parts for commercial and office projects. "Making acoustical panels is a very simple process," Rybak said. "The Skipper has 62 boring heads to drill many holes at a time in the veneered MDF panels for sound absorption. While the Skipper is drilling a panel, the same operator is using the Rover S to drill holes from the other side of the board. This makes the operation very fluent and more productive." The Rover S, which is also used to fabricate parts from plastic and non-ferrous metals, replaced the job performed by one of MCM's two Rover B CNC nesting routers. Both Rover B machines are now dedicated to custom products. The Rover C9, a five-axis router with a flat table, is another example of a machine doing production and custom work. "The C9 is a combination machine that we use for the acoustical product but get used more for three-dimensional parts. We recently used the C9 to cut a railing that went through three floors of an office". The railing was actually glued-up solid oak about 2-3/8 inch. The top of the railing for each landing had a fairly intricate spiral design. "The five-axis machines have the most downtime; we may only use them 20 percent of the time," Rybak said. "But without the five-axis capacity we wouldn't be able to do a lot of the parts, like the railings. While you pay a premium for it, for us it's worth it."

**IT'S BEEN A GOOD MARRIAGE. BIESSE IS A WORLD-CLASS SUPPLIER AND HAS BEEN A GOOD COMPANY FOR US OVER THE YEARS IN TERMS OF SERVICE AND SUPPORT**

Gregory Rybak  
Founder

MCM2001.CA



Founded in Italy,  
international native.

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.

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