

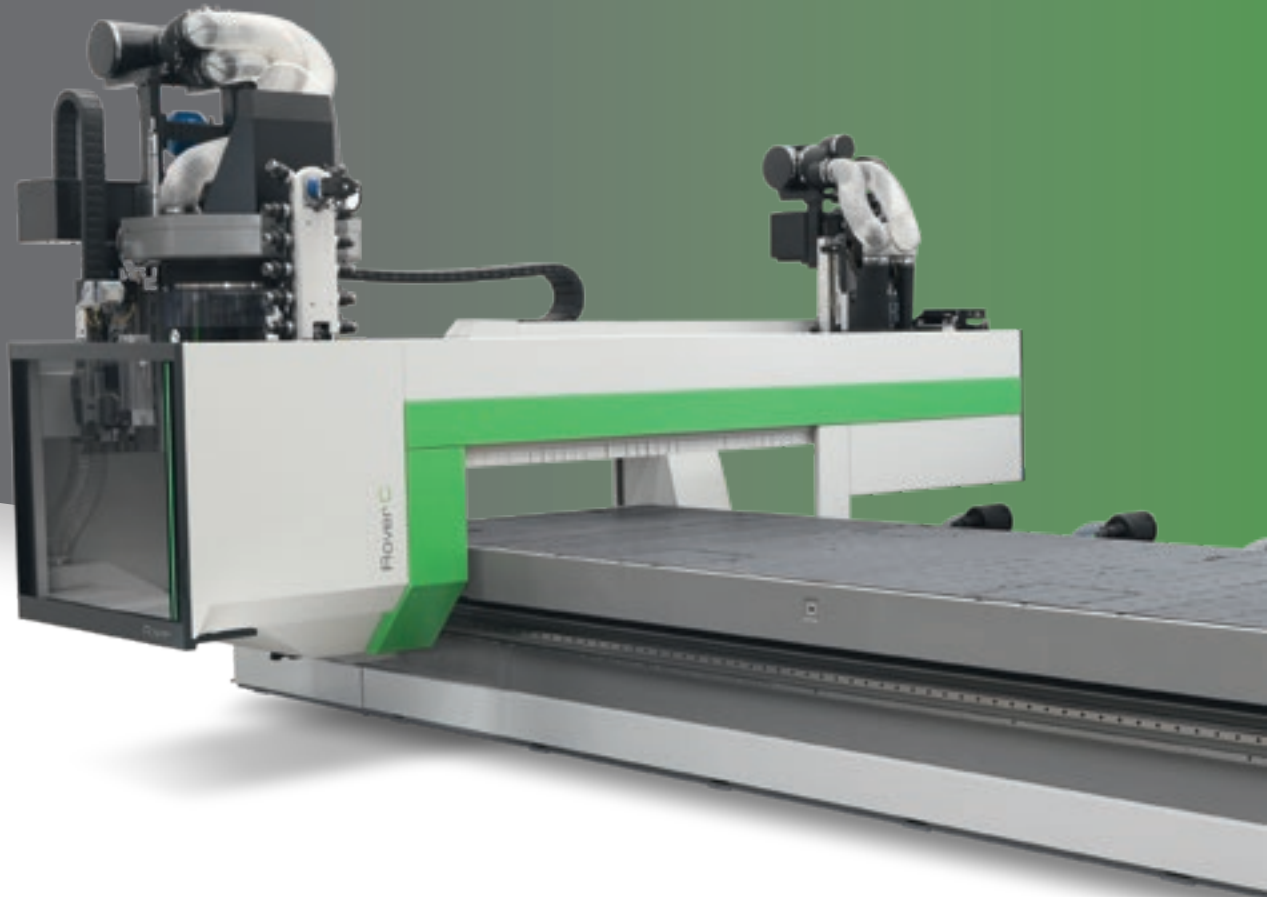
PRO VER CFT

CNC MACHINING
CENTRE



 **BIESSE**

THE MACHINE FOR COMPLEX MACHINING OPERATIONS



THE MARKET EXPECTS

a change in manufacturing processes, enabling companies to **accept the largest possible number of orders**. This is coupled with the need to maintain high quality standards whilst offering product customisation with quick and clearly-defined delivery times.

BIESSE RESPONDS

with **technological solutions** to meet the requirements of companies that manufacture to order, with significantly reduced costs and cycle times. **Rover C FT** is the new stand-alone machining centre which has been designed not only for nesting, but also the processing of thick panels, mixed and complex production runs as well as machining of aluminium and other technological materials.

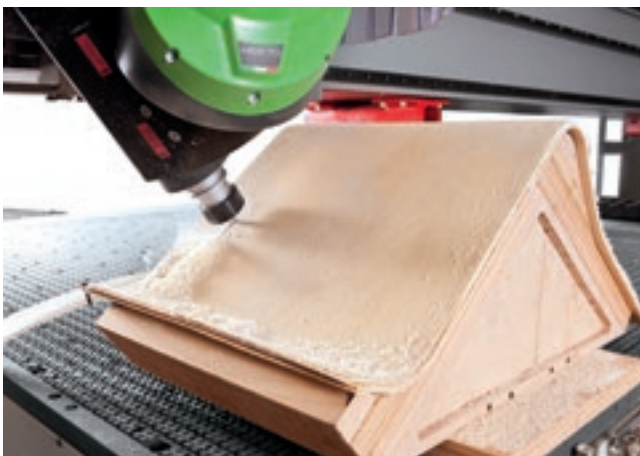
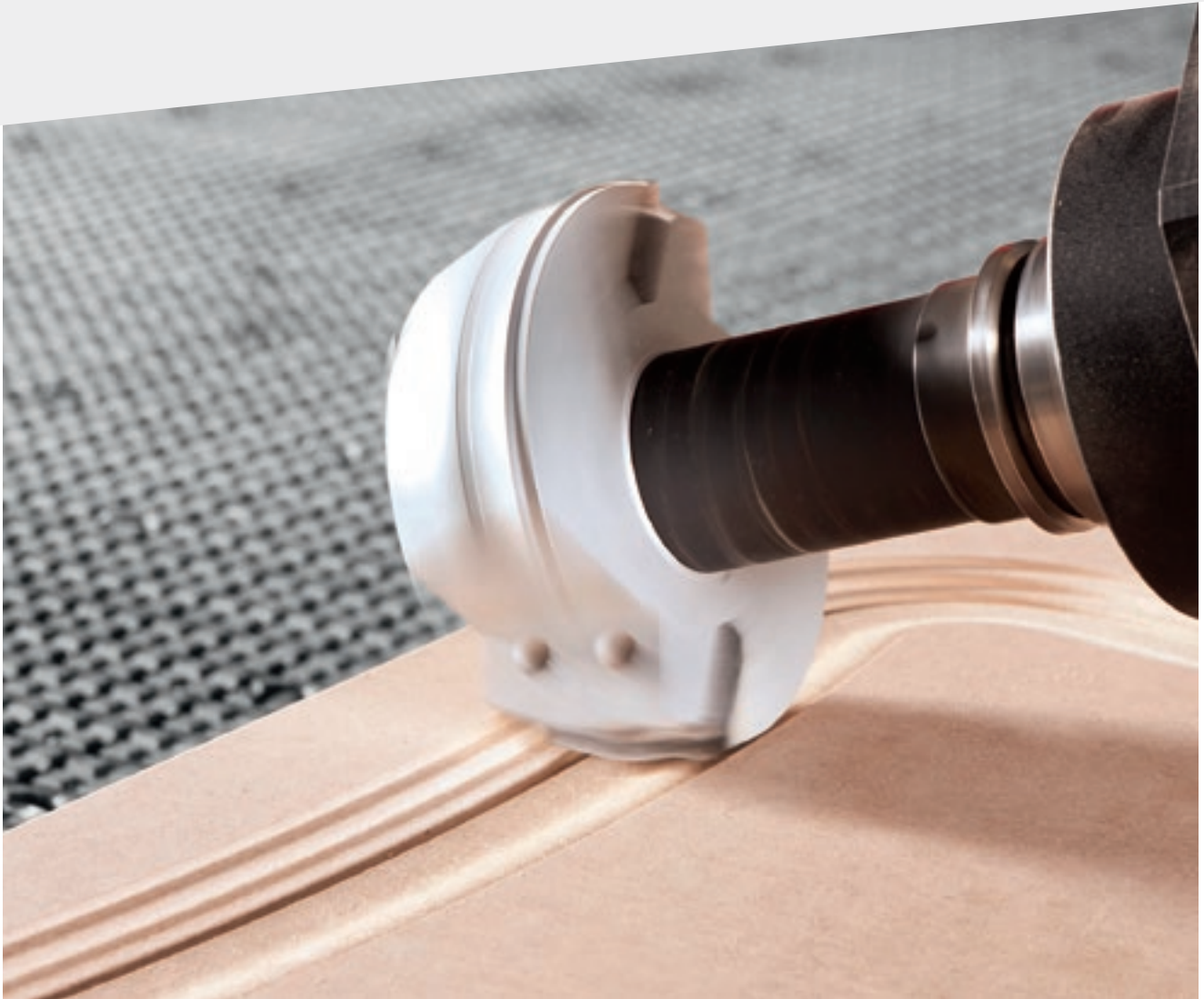


ROVER C FT

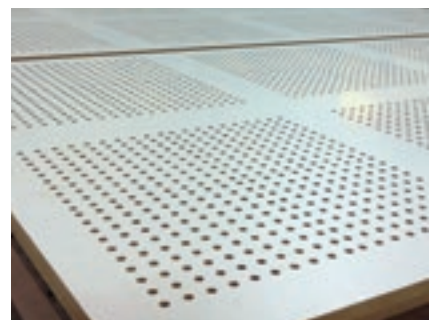
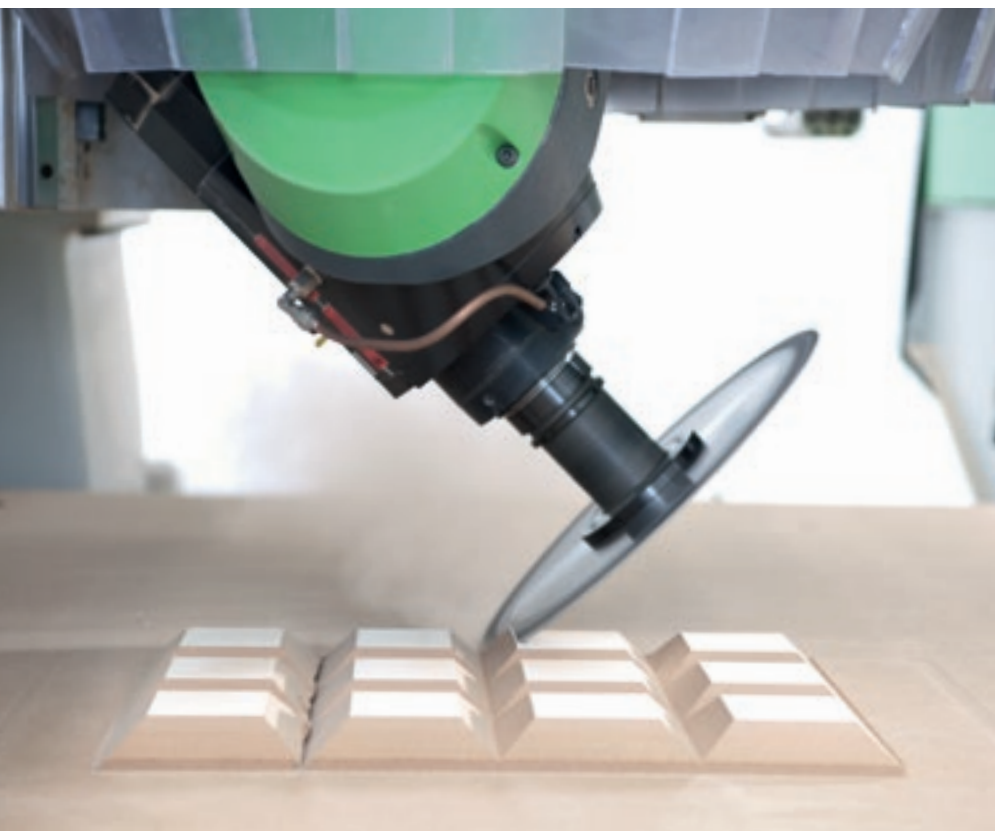
- ✓ HIGH-END TECHNOLOGY FOR SUPERIOR PERFORMANCE
- ✓ MACHINING QUALITY
- ✓ MAXIMUM PRECISION
- ✓ LONG TERM RELIABILITY

INFINITE POSSIBILITIES FOR MACHINING OPERATIONS

The new Rover C technology allows users to machine complex-shaped and extra-thick panels, guaranteeing quality, precision and absolute reliability over time.



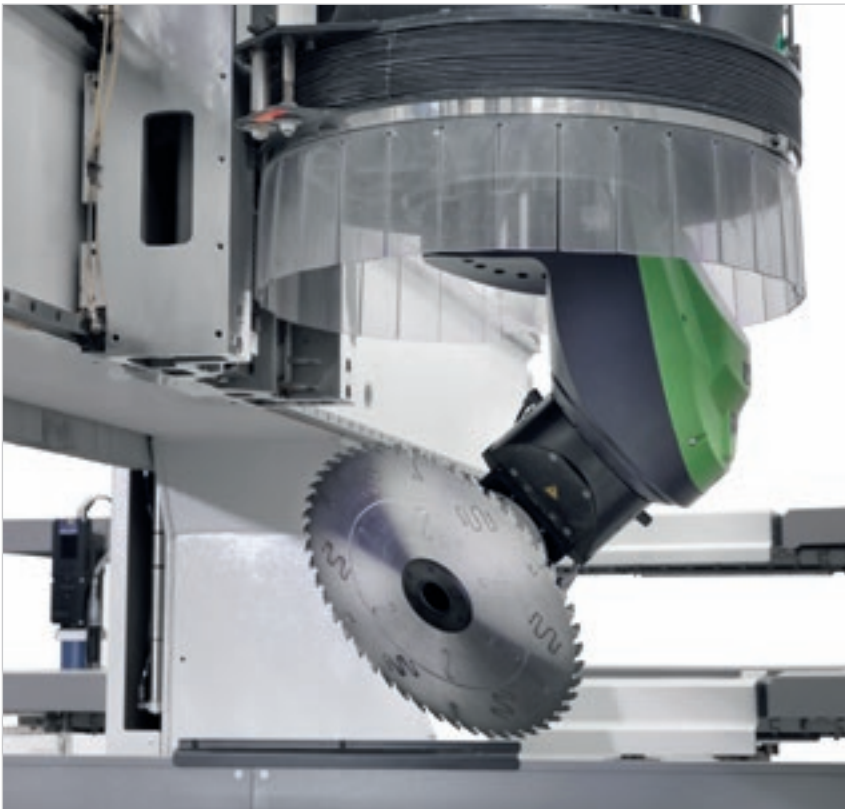
BIESSE'S SECTOR-LEADING TECHNOLOGY
AND 10-YEAR EXPERIENCE IN NESTING PROVIDE
THE PERFECT RESPONSE TO AN EXTENSIVE
RANGE OF APPLICATIONS



The modularity of the design allows Biesse to deliver machines with configurations which are customised to meet the requirements of individual customers.

HIGH-END TECHNOLOGY FOR SUPERIOR PERFORMANCE

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

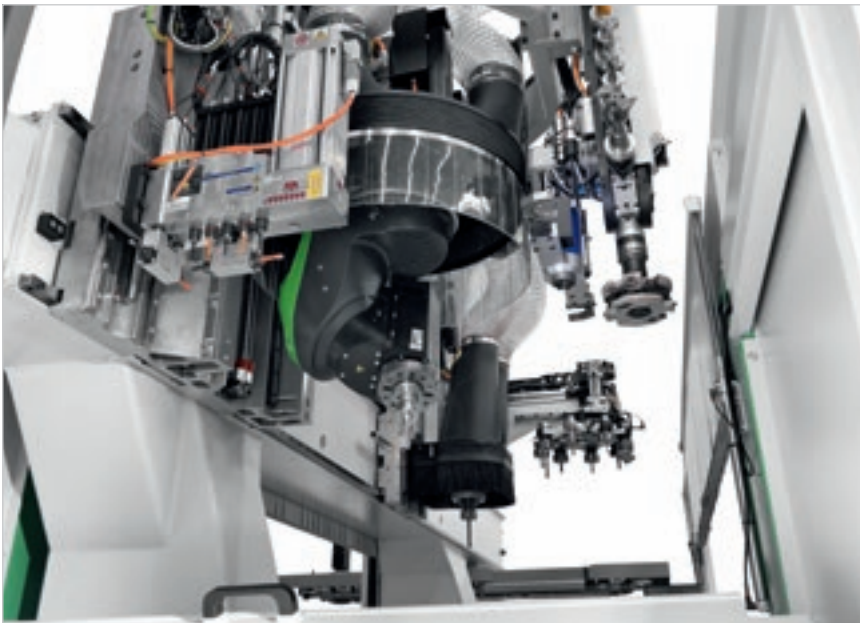


Operating section with 5 21.5 kW/8000 rpm interpolating axis - the most powerful on the market - which supports complex processing operations whilst ensuring quality and precision.



The solutions developed for Rover C enable quick tool changes coupled with reduced cycle times.

**PROCESSING OF VERY HIGH COMPONENTS
THANKS TO 400 MM AND 500 MM (OPT)
WORKING HEIGHT.**



The possible combination of 5-axis and 4-axis units enables the processing of any type of product. Independent Y axes support tool changes whilst the machine is running, using the largest possible number of tools available on the machine.

**AXES VECTOR SPEED FROM 124 TO 156
M/MIN AND ACCELERATION FROM 3.5
TO 5 M/SEC² FOR HIGH PRODUCTIVITY.**

HIGH TECHNO LOGY

PRECISE POWER

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

La The new operating section with 5 interpolating axis supports complex processing operations whilst ensuring quality and precision.

By combining 5 axis and 4 axis units it is possible to process any type of product.

Independent Y axes, that enable users to carry out tool changes without affecting cycle times, and high axes speed and acceleration guarantee high productivity.

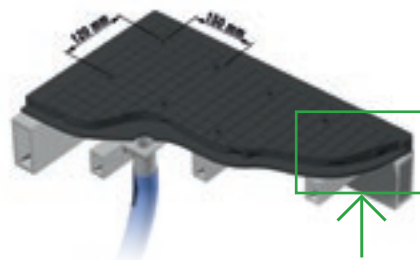


MAXIMUM MACHINING FLEXIBILITY

Advanced work table technology to machine panels of different types and sizes with the utmost reliability.



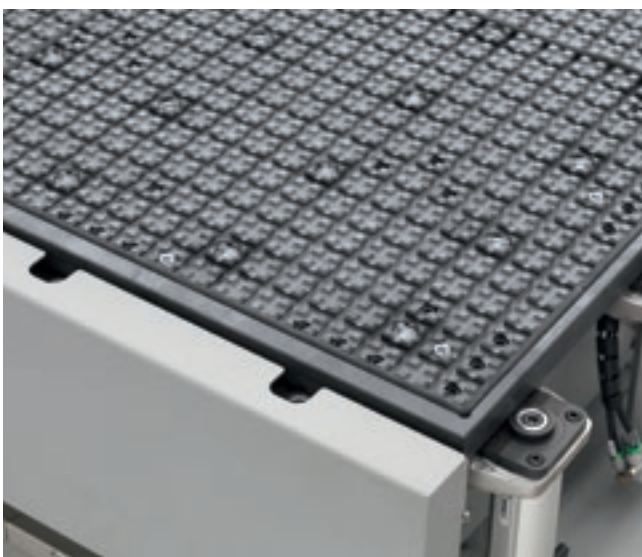
Multi-zone technology seamlessly and automatically adapts the vacuum of the machine to the different board sizes that the customer has in his production.



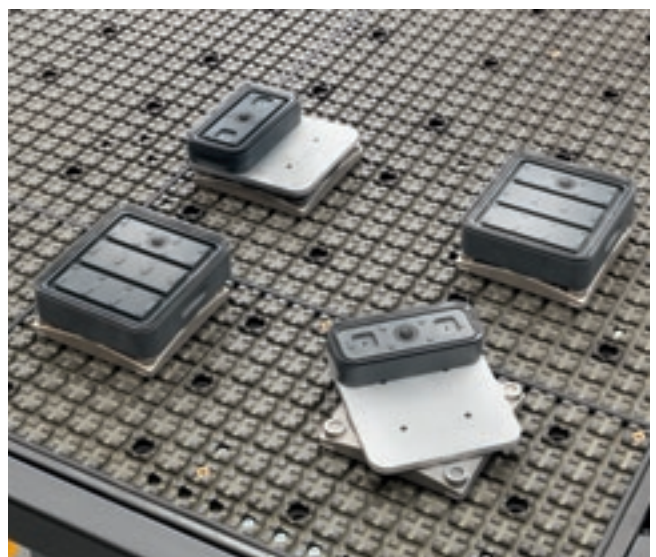
VACUUM DISTRIBUTION CHAMBER

The locking of the vacuum adapts perfectly to the panel size and enables the switching from one format to another without the need for manual operations.

MAXIMUM PANEL GRIPPING THANKS TO AN ADVANCED VACUUM DISTRIBUTION SYSTEM BUILT INTO THE WORK TABLE.



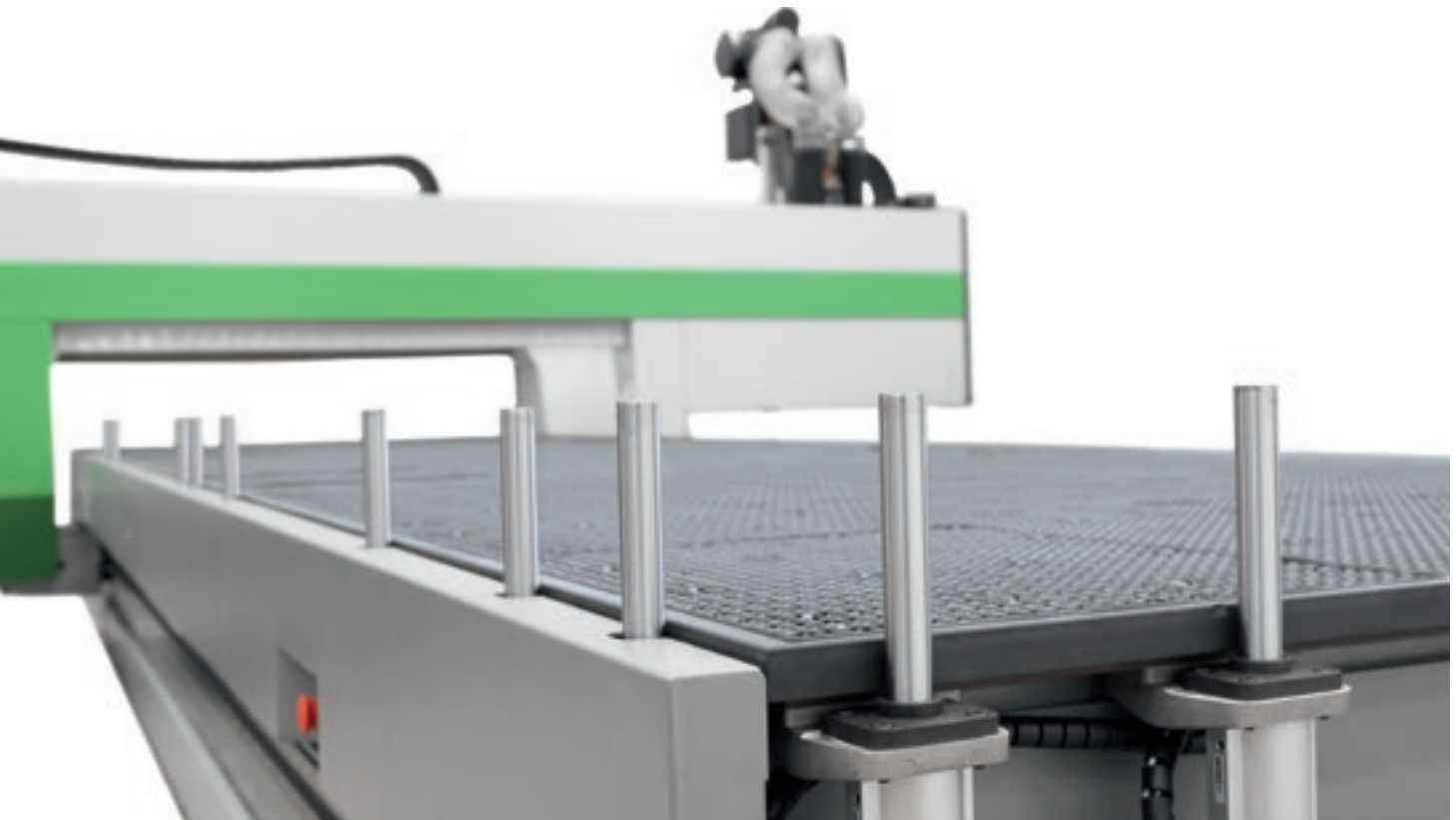
Work table in layered phenolic material with vacuum system.



Vacuum modules can be freely positioned on the FT work table without the need for special connections.

PERFECT SECURING OF ALL PANEL TYPES

No limits with regard to securing panels. Biesse can provide multiple solutions, in line with specific customer needs.



Special vacuum-locking of panels positioned on the jig.



Option to use Uniclamp vices or custom pneumatic locking systems.

MAXIMUM WORKING PRECISION MAINTAINED OVER TIME

The Gantry structure has been designed to improve the precision and reliability of machining operations.



Integral one-piece closed loop ring structure base.

The extremely robust, rigid design, which offers exceptional performance, was created specifically to ensure maximum processing quality, stability and precision when machining.

Choose from a comprehensive range of bed sizes for machining panels of all sizes.

ROVER C FT 1638

ROVER C FT 1665

ROVER C FT 1938

ROVER C FT 1965

ROVER C FT 2248



The double X-axis motorisation supports high speeds and accelerations whilst ensuring high quality precision and finish.

EXCEPTIONAL FINISH QUALITY

Electrospindles, boring heads and aggregates are designed and manufactured for Biesse by HSD, the global leader in the mechatronics sector.



Biesse uses the same high-tech components for all machines in its product range.

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.

New **C Torque axis**: with Direct Drive system. The absence of gears allows for maximum precision, reliability and speed. Continuous 360° rotation and the option to interpolate allows for the machining of pieces with complex shapes.

IDENTITY

PRACTICAL DESIGN

An innovative yet simple design is the hallmark of Biesse's distinctive identity.

The transparent polycarbonate reinforced protection door is designed to guarantee maximum visibility for the operator. Fitted with 5-colour LEDs indicating machine status, it ensures that processing phases can be easily and safely monitored.

ROVER

CYCLE-TIME REDUCTION FOR HIGH PRODUCTIVITY

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



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



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



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

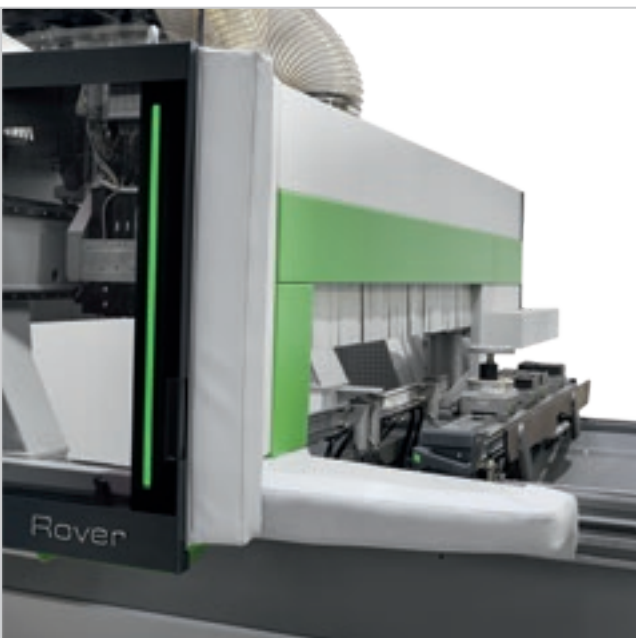
The **Pick Up** station supports automatic tool-holder rack tooling.



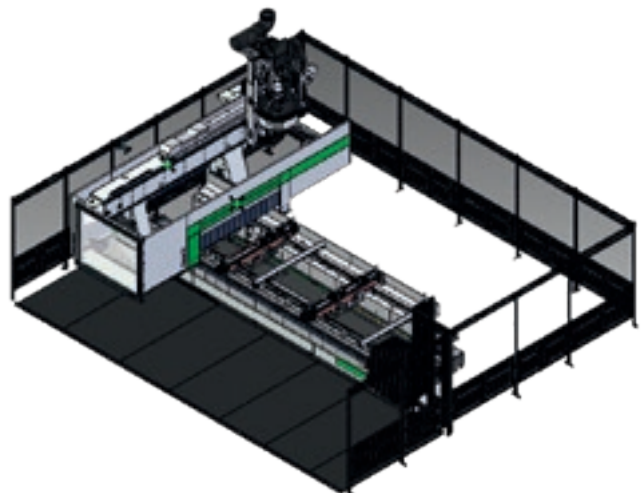
Elimination of operator error and reduction in tool change set-up time, thanks to the contact pre-setter, which automatically determines the length of the tool.

MAXIMUM OPERATOR SAFETY

Pressure-sensitive floor mats enable the machine to operate at constant maximum speed.



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



PERIMETER GUARDS WITH FRONT ACCESS DOOR



Side curtain guards to protect the working unit, which can be moved to enable the machine to work at maximum speed in total safety.

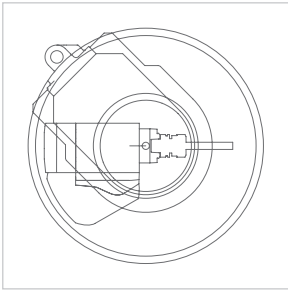


Remote control panel for direct and immediate operator control.

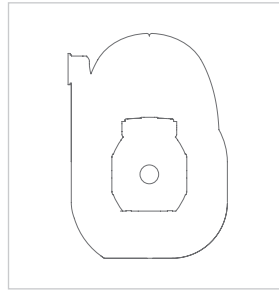
Maximum visibility of machining operation. **LED bar with 5 colours** showing machine status in real time. Facilitated access during tool change operations thanks to the openable front hood.



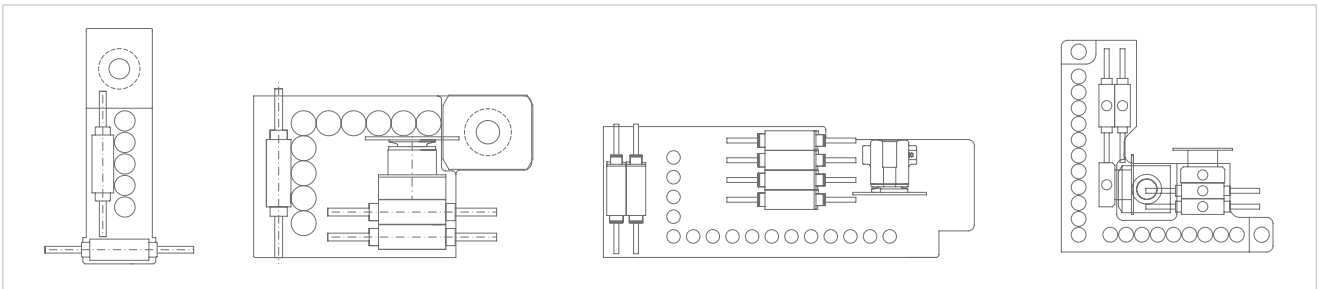
CUSTOMISABLE CONFIGURATIONS DEPENDING ON DIFFERENT PRODUCTION NEEDS



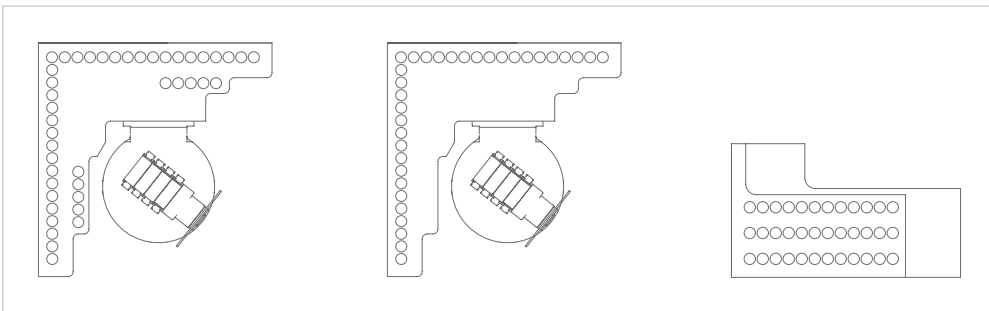
5-axis milling unit with power up to 21.5 kW.



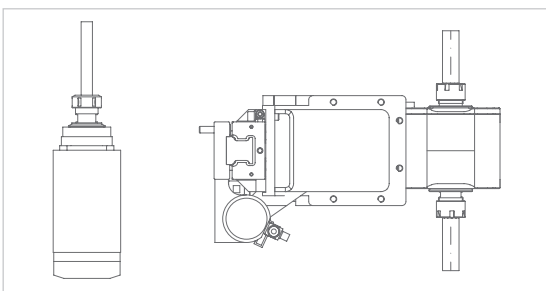
Milling head with air or liquid cooling and power up to 19.2 kW.



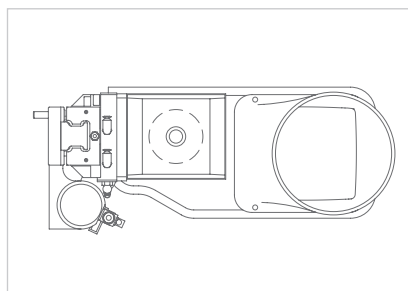
Boring heads from 9 to 30 tools: BHZ 9 - BHZ 17 L - BHZ 29 L - BHZ 30 2L up to 6000 rpm.



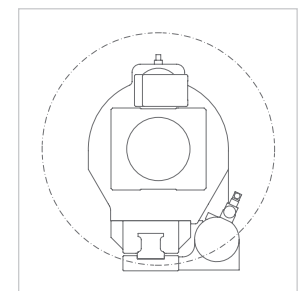
Boring heads BHC42 - BHC32 - BH36 up to 8000 rpm.



1 or 2 outlet horizontal milling units.



6 kW vertical milling unit.



Multi-function unit with 360° rotation.

A COMPLETE RANGE OF AGGREGATES



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



Fixed horizontal motor for lock housing.



2-output liquid-cooled horizontal motor. Also available in NC tilting version for horizontal, tilting or vertical machining operations.

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 of the soft-console controls

INDUSTRY 4.0 READY



Industry 4.0 is the new industry frontier, based on digital technologies and on machines that speak to companies. The products driving this revolution can communicate and interact independently within production processes, which in turn are connected via intelligent networks.

Biesse is dedicated to transforming the factories owned by our customers into real-time factories that are ready to provide digital manufacturing opportunities. Intelligent machines and software become indispensable tools that facilitate the daily work of those who machine wood and other materials on a daily basis.

INDUSTRY 4.0 READY

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.



REDUCED TIME AND WASTE



B_NEST IS THE B_SUITE PLUGIN SPECIFICALLY FOR NESTING OPERATIONS. IT ALLOWS YOU TO ORGANISE YOUR NESTING PROJECTS IN A SIMPLE WAY, REDUCING THE MATERIAL WASTE AND MACHINING TIMES.

- ✔ Flexibility with reduced production times and costs.
- ✔ Optimisation for every type of product.
- ✔ Management of articles, sheets and labels.
- ✔ Integration with company software.



MANAGING PRODUCTION IN A SIMPLE, USER-FRIENDLY MANNER



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



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.

MANAGE THE JOB ORDER



PLAN

SMART CONNECTION

Powered by Retuner



SCHEDULE

WORK

i 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



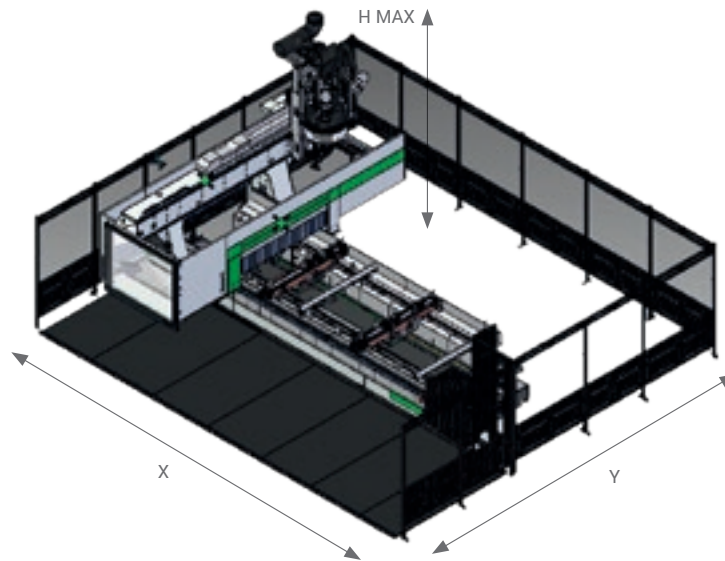
SOPHIA is the IoT platform created by Biesse in collaboration with Accenture which enables its customers to access a wide range of services to streamline and rationalise their work management processes.

It allows alerts and indicators to be sent to the customer in real time, in relation to production, the machines used and the type of process carried out. These are detailed instructions for more efficient use of the machine.

 **BIESSE**

in collaboration with **accenture**

TECHNICAL SPECIFICATIONS



CE WORKING DIMENSIONS

		X CE Mats	Y CE Mats	X CE Bumper	Y CE Bumper	H MAX 5 axis
ROVER C FT 1638	mm/inch	8121/319	6547/258	8361/329	6530/257	3370/133
ROVER C FT 1665	mm/inch	11027/434	6547/258	11267/443	6530/257	3370/133
ROVER C FT 1938	mm/inch	8121/319	6567/259	8361/329	6530/257	3370/133
ROVER C FT 1965	mm/inch	11027/434	6567/259	11267/443	6530/257	3370/133
ROVER C FT 2248	mm/inch	9320/367	7120/280	9574/377	7064/278	3370/133

WORKING FIELDS

		X	Y	Z
ROVER C FT 1638	mm/inch	3765/148	1560/61	400/16 - 500/20
ROVER C FT 1665	mm/inch	6450/254	1560/61	400/16 - 500/20
ROVER C FT 1938	mm/inch	3765/148	1875/74	400/16 - 500/20
ROVER C FT 1965	mm/inch	6450/254	1875/74	400/16 - 500/20
ROVER C FT 2248	mm/inch	4801/189	2205/87	400/16 - 500/20

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 (LpA) 83 dB (A). Superficial weighted noise level A (LwA) 106 dB (A). Machining an MDF piece with a 19 mm height: weighted surface noise level A (LpA) 79 dB (A). Uncertainty factor K = 4 dB.

The measurement was carried out in compliance with EN ISO 3746 - 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. Despite the fact that there is a relationship between emission and exposure levels, this may not be used in a reliable manner to establish whether further measures need to be taken. The factors determining the exposure level for the workforce include length of exposure, work environment characteristics, other sources of dust and noise, etc. i.e. the number of other adjoining machines and processes. At any rate, the above information will enable the operator to better evaluate dangers and risks.

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

THE SAGRADA FAMILIA SITE BETS ON BIESSE

The carpentry workshop of the majestic cathedral designed by Antoni Gaudí has purchased a BIESSE processing centre mainly to develop moulds for the production of stone, marble and concrete elements, as well as shuttering modules. Salvador Guardiola, a highly experienced carpenter specialised in ship-building and responsible for recreating one of the two Caravels used by Columbo during his voyage to America, has been in charge of the Sagrada Familia site for 19 years. "We have chosen

BIESSE for the quality of their processing centre and their technical service", states Guardiola. "The machine cannot stop: some days, it works 24 hours over 24 and, therefore, we needed someone who is able to immediately react to any emergencies". As a matter of fact, BIESSE's technical service for the Sagrada Familia site shall manage to be effective, timely and accurate thanks to the on-line service that the company offers to its customers.

LIVE THE EXPERIENCE



Interconnected technologies and advanced services that maximise efficiency and productivity, generating new skills to serve better our customer.

**LIVE THE BIESSE GROUP
EXPERIENCE AT OUR CAMPUSES
ACROSS THE WORLD**

