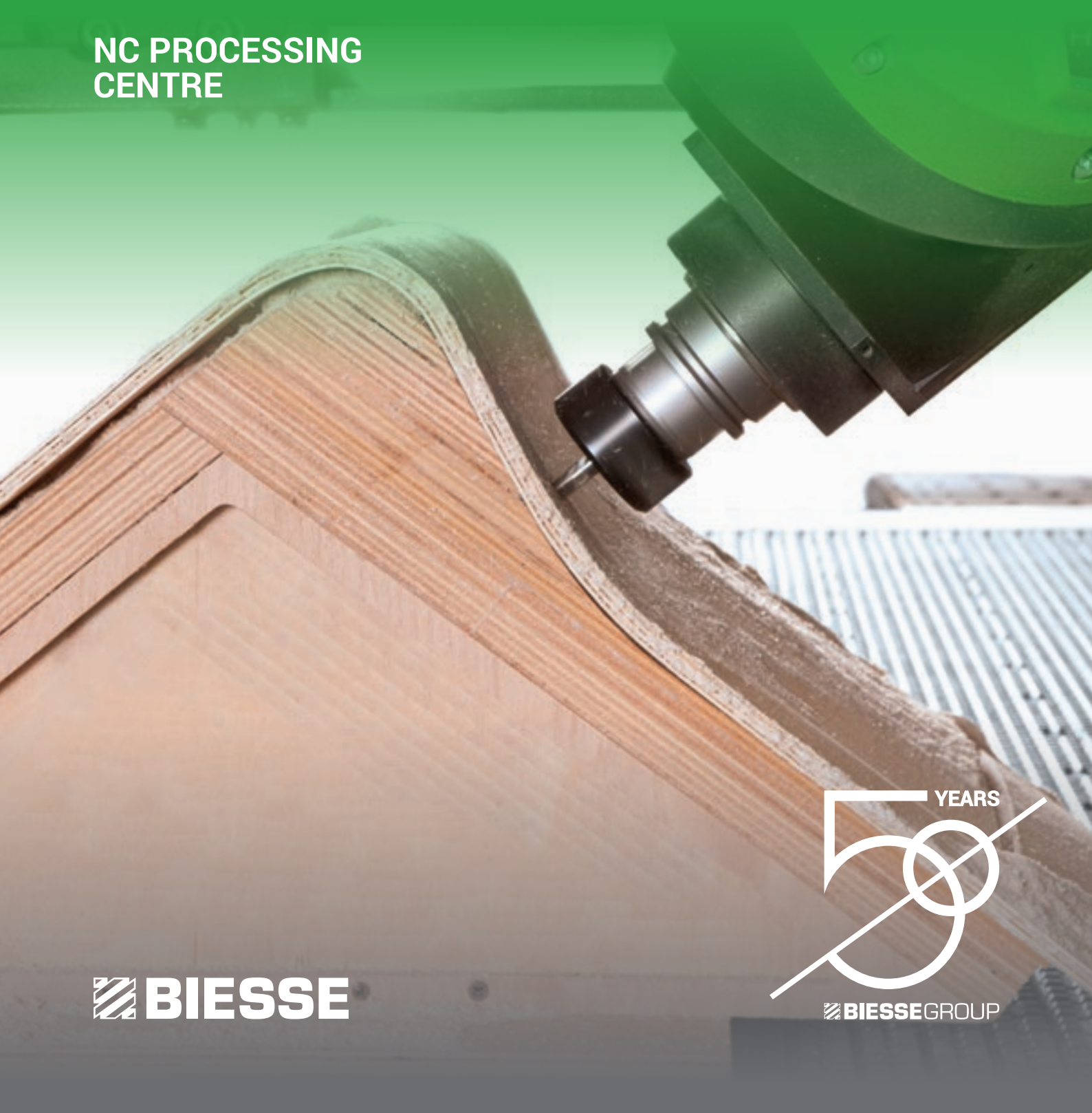


# PRO VER CFT

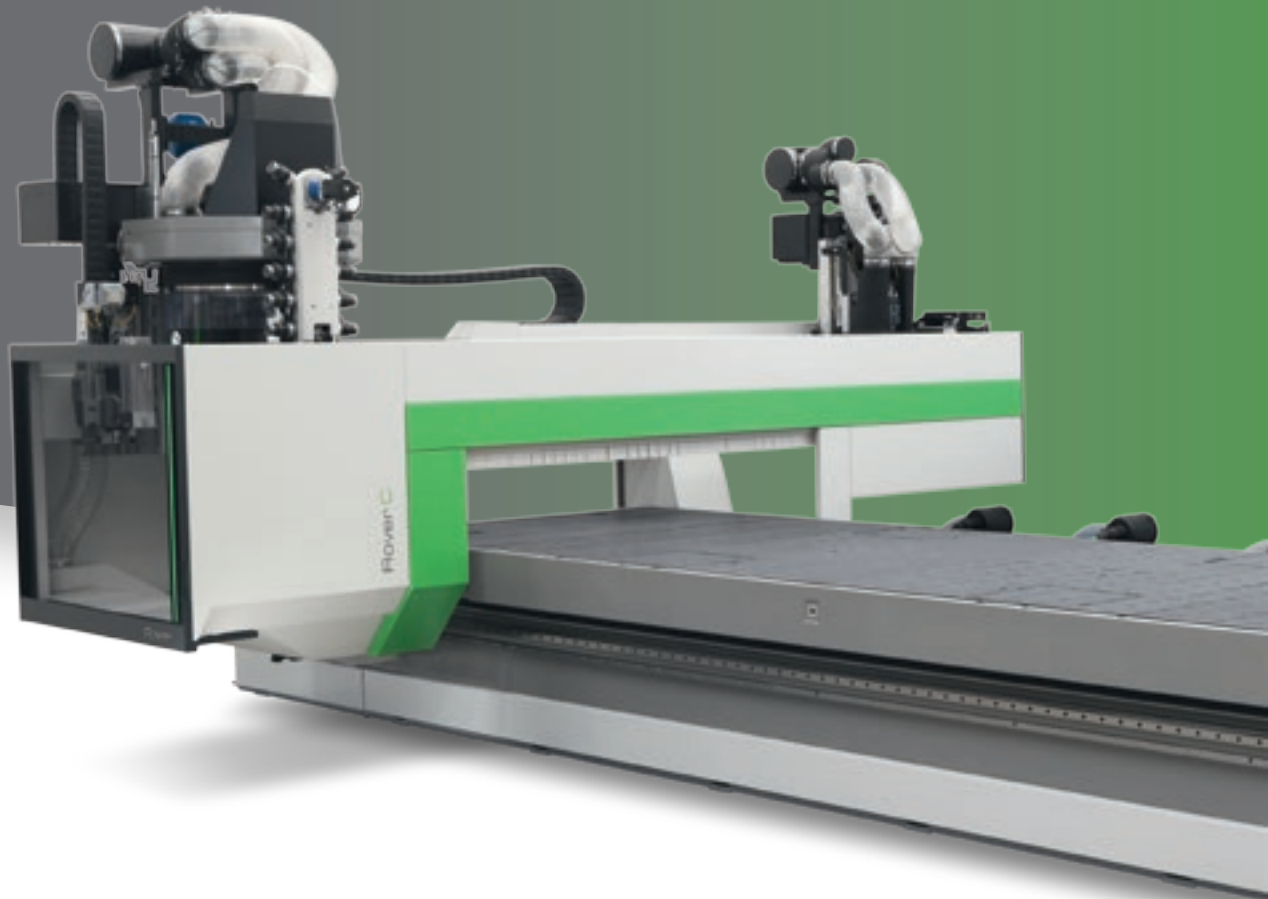
NC PROCESSING  
CENTRE



 **BIESSE**

50 YEARS  
  
 **BIESSEGROUP**

# THE MACHINE FOR COMPLEX MACHINING OPERATIONS



## THE MARKET DEMANDS

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 RISPONDE

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.

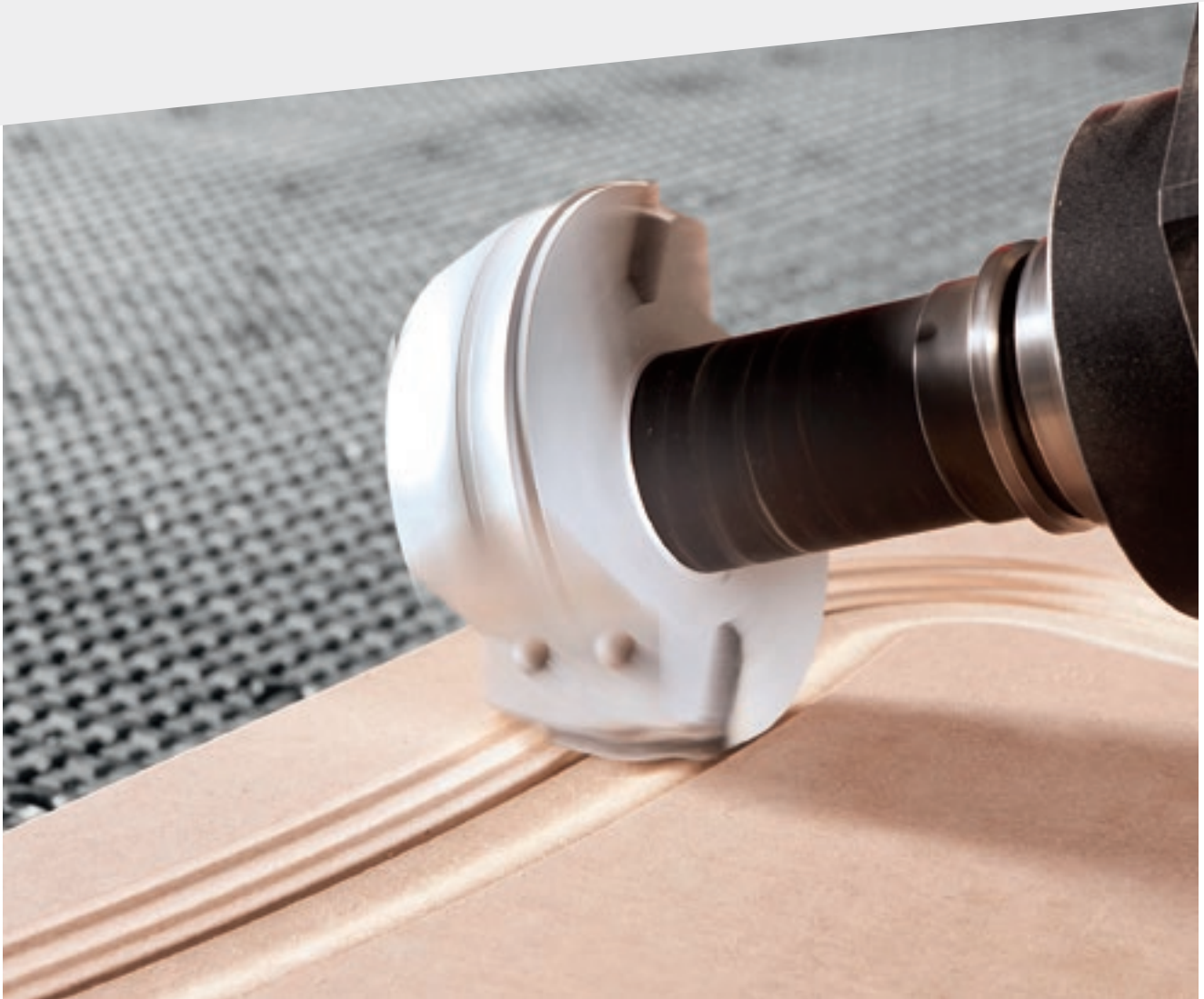


## ROVER C FT

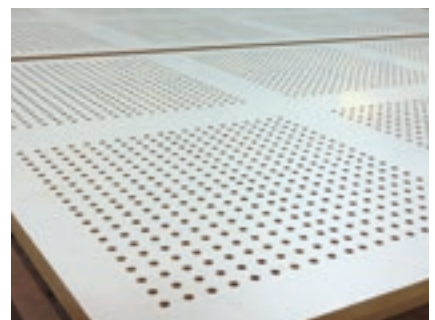
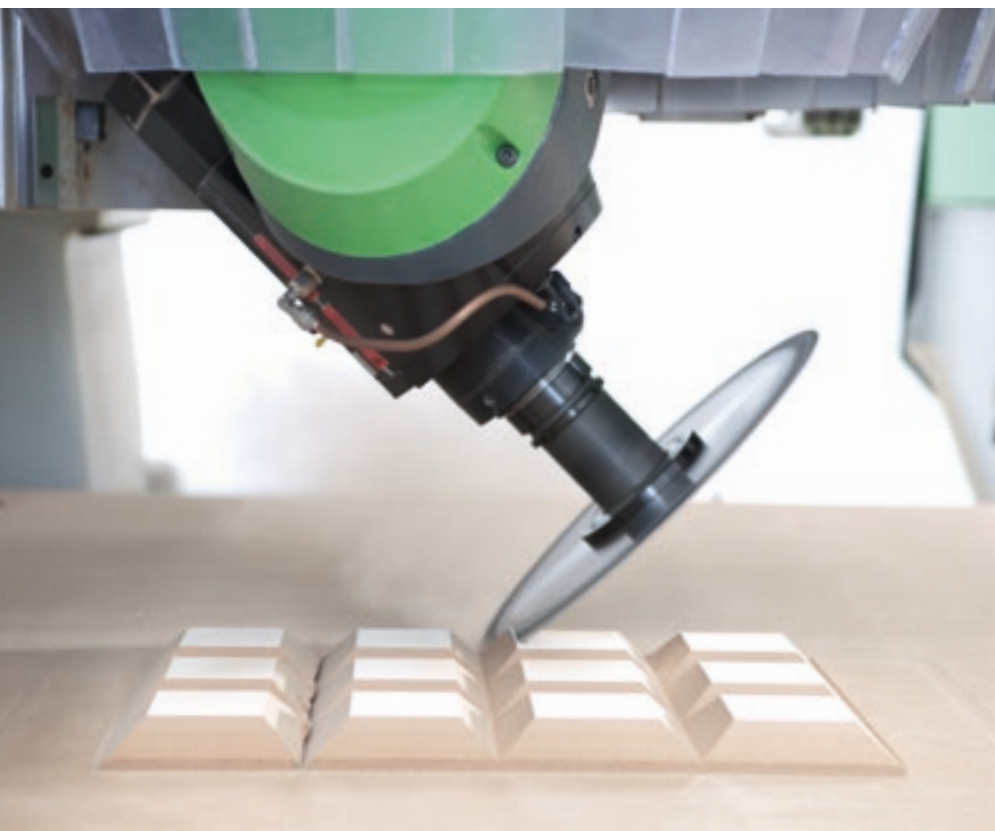
- ✔ HIGH-END TECHNOLOGY FOR SUPERIOR PERFORMANCE
- ✔ MACHINING QUALITY
- ✔ MAXIMUM PRECISION
- ✔ LONG TERM RELIABILITY.

# 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.



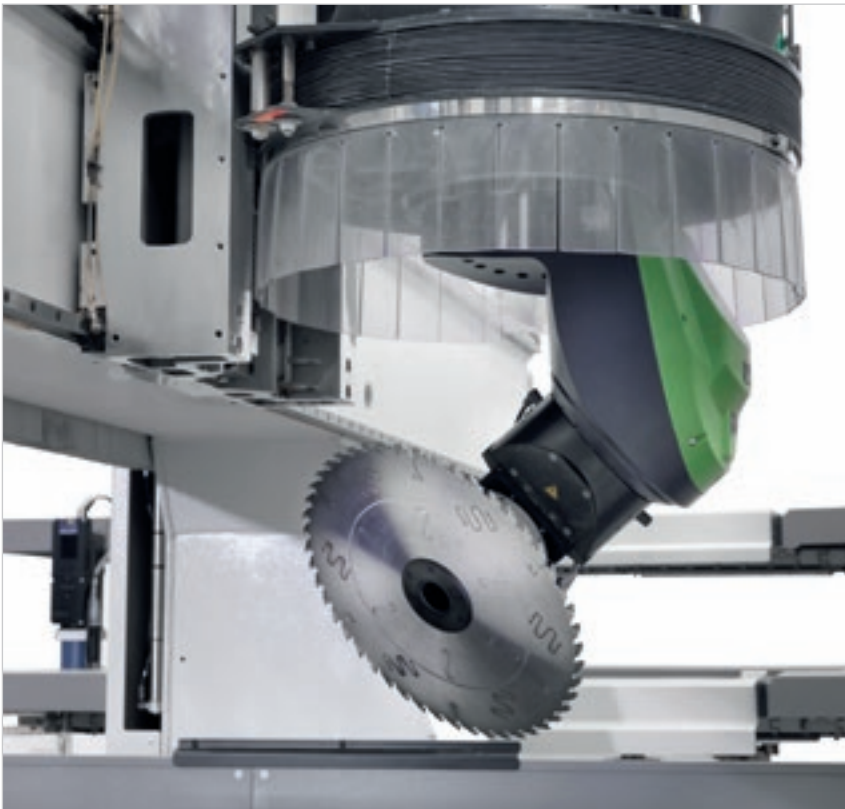
BIESSE'S SECTOR-LEADING TECHNOLOGY  
AND 10-YEAR EXPERIENCE IN NESTING PROVIDE  
THE PERFECT RESPONSE TO AN EXTENSIVE  
RANGE OF APPLICATIONS



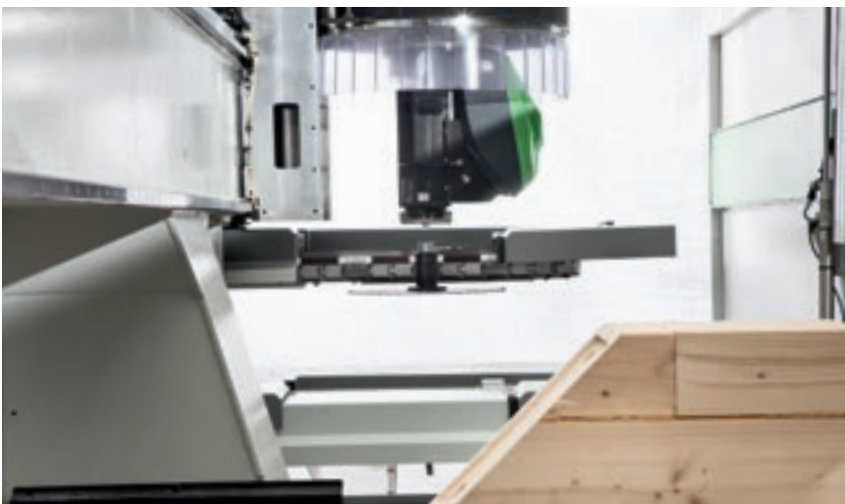
The modularity of the design allows Biesse to deliver machines with configurations which are customised to meet the requirements of individual customers.

# HIGH-END TECHNOLOGY FOR SUPERIOR PERFORMANCE

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

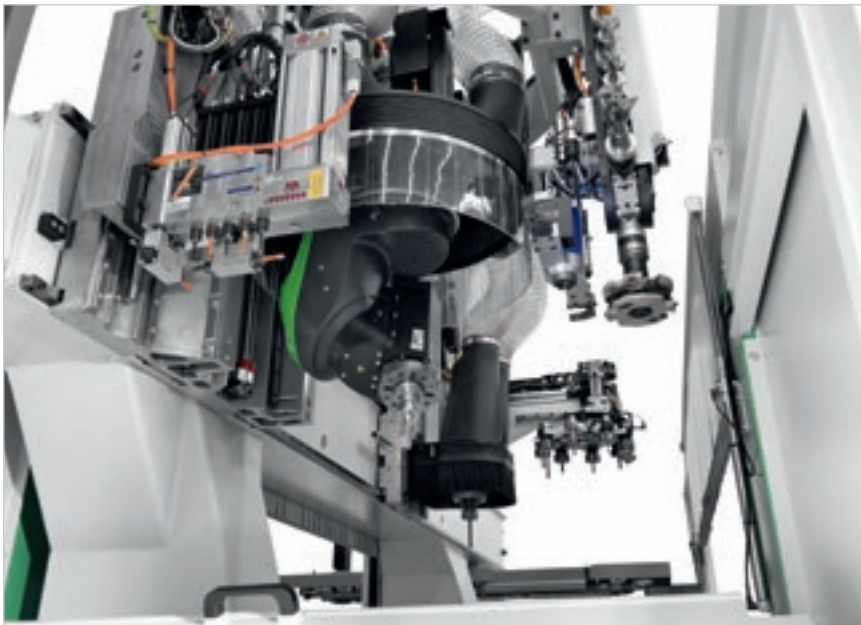


Operating section with five 21.5 kW/8000 rpm interpolating axes - the most powerful on the market - which supports complex processing operations whilst ensuring quality and precision.



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-axes and 4-axes 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/SEC<sup>2</sup> 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 axes supports complex processing operations whilst ensuring quality and precision.

By combining 5 axes and 4 axes 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.



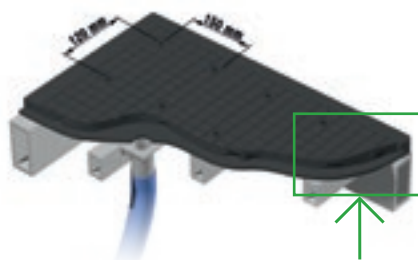


# MAXIMUM MACHINING FLEXIBILITY

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



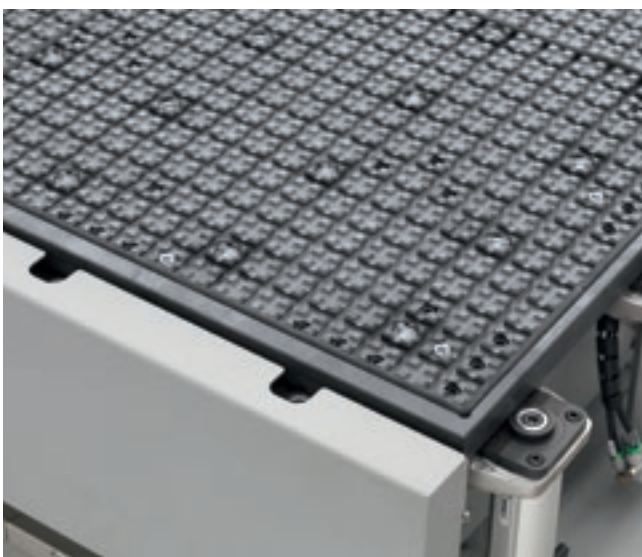
Multi-zone technology seamlessly and automatically adapts the vacuum of the machine to the different board sizes that the customer has in his production.



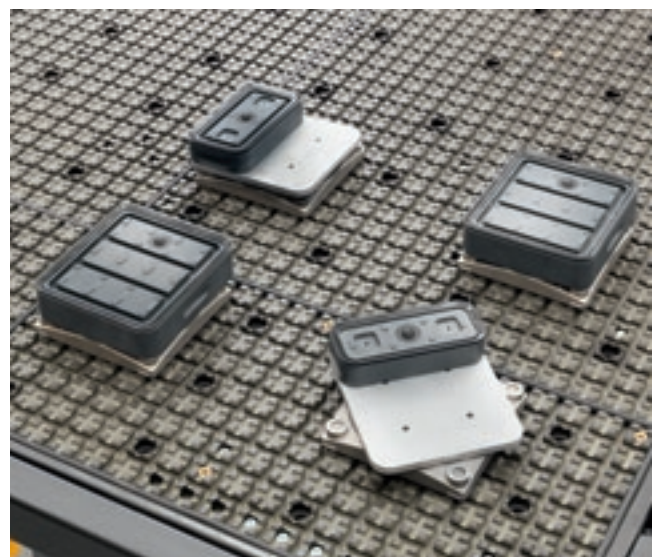
VACUUM DISTRIBUTION CHAMBER

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.



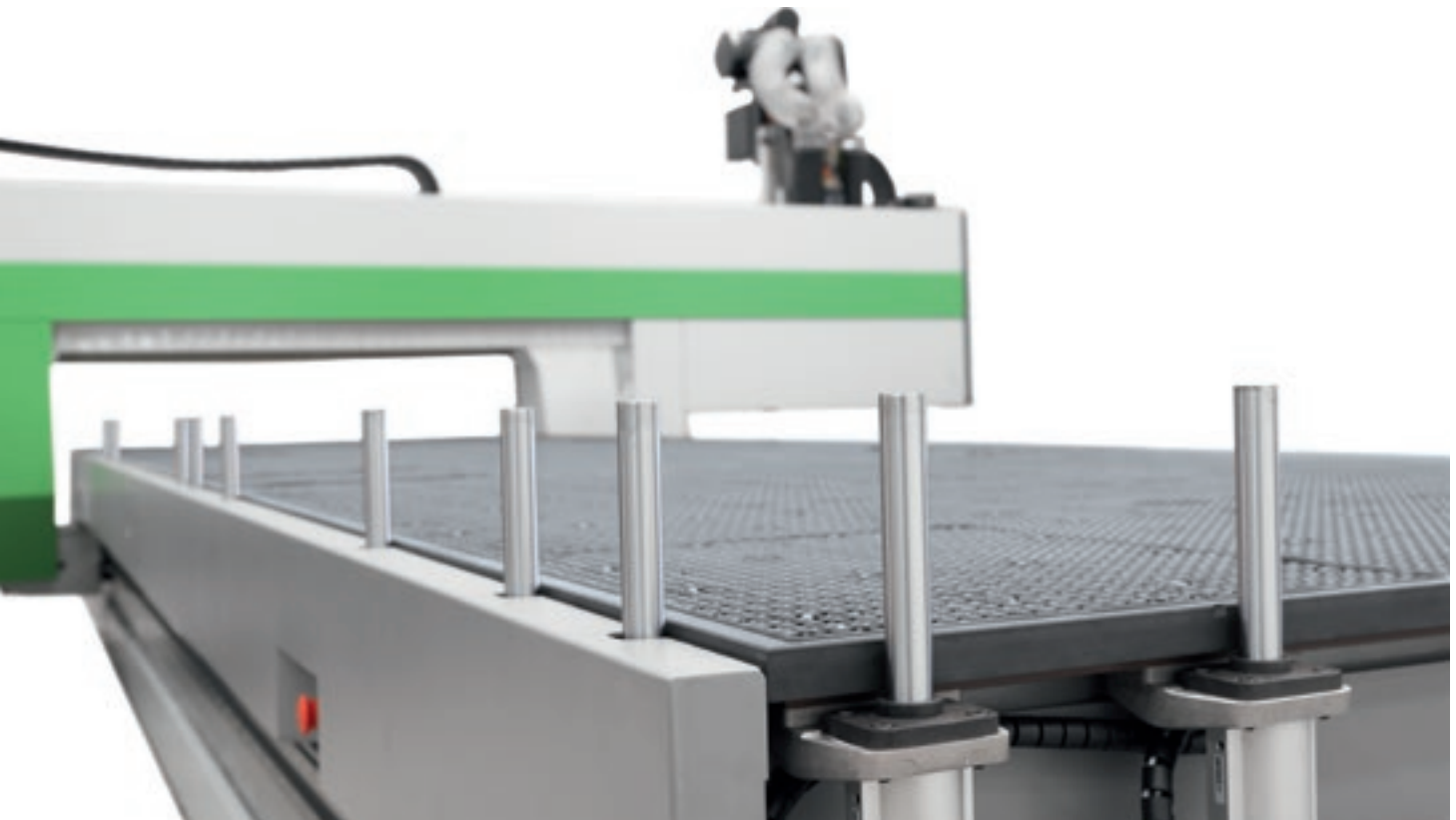
Work table in layered phenolic material with vacuum system.



**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 1638 FT
- ROVER C 1665 FT
- ROVER C 1938 FT
- ROVER C 1965 FT
- ROVER C 2248 FT



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.



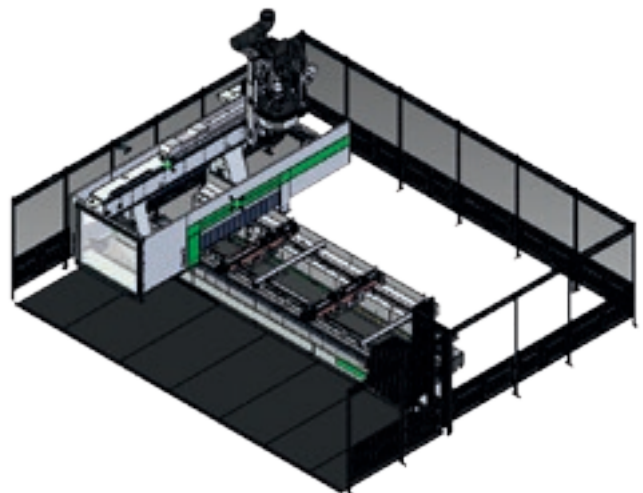
Elimination of operator error and reduction in tool change set-up time, thanks to the contact pre-setter, which automatically determines the length of the tool.

# 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.

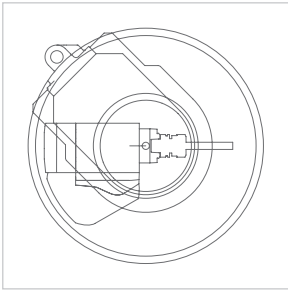


**Remote control panel** for direct and immediate operator control.

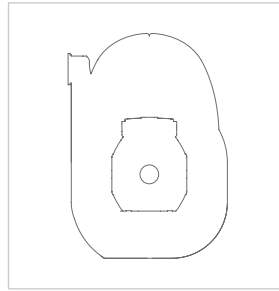
Maximum visibility of machining operation. **LED bar with 5 colours** showing machine status in real time. Facilitated access during tool change operations thanks to the openable front hood.



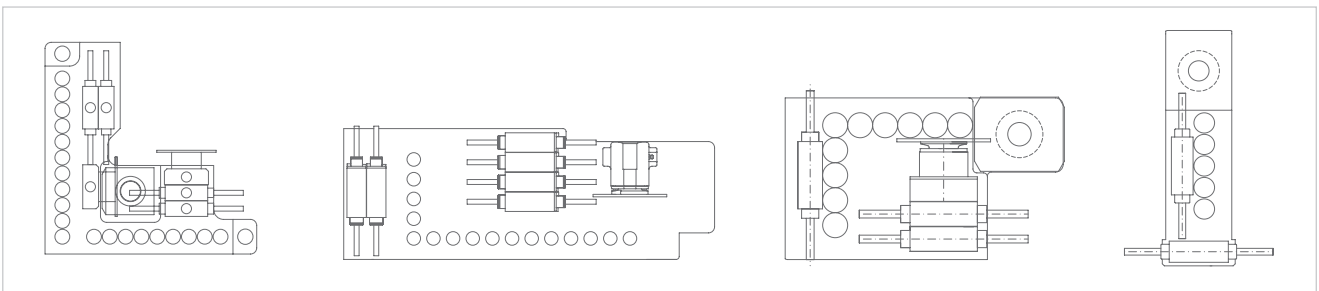
# CUSTOMISABLE CONFIGURATIONS DEPENDING ON DIFFERENT PRODUCTION NEEDS



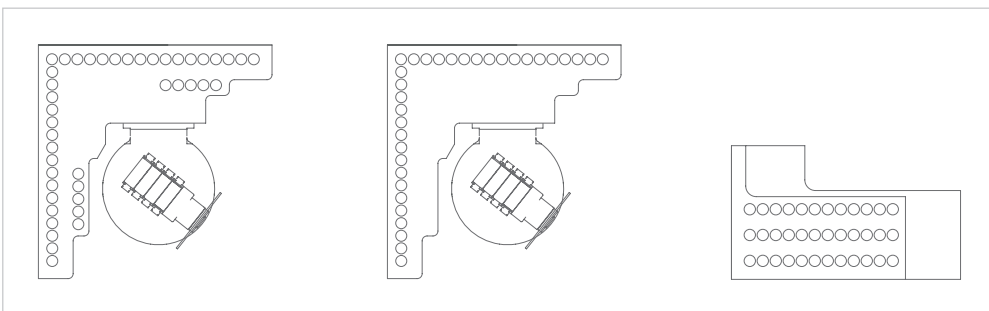
5-axis milling unit with power up to 21.5 kW.



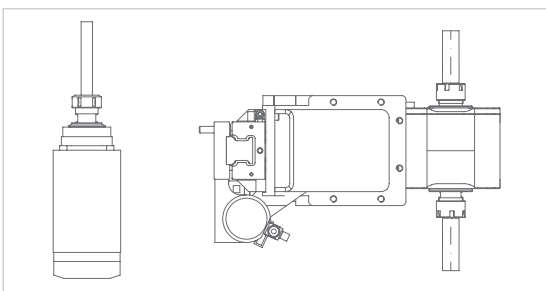
Milling head with air or liquid cooling and power up to 19.2 kW.



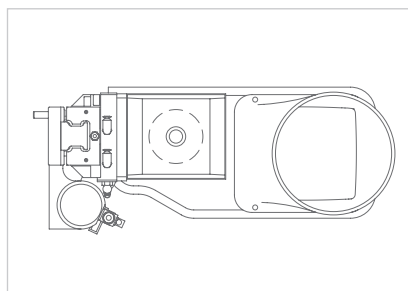
Boring heads from 9 to 30 tools: BHZ30 2L – BHZ 29 – BHZ17-BHZ9 up to 6000 rpm.



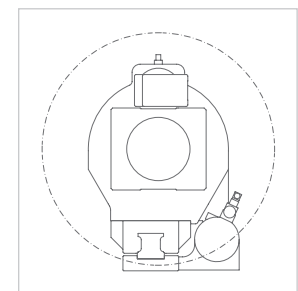
Boring heads BHC42 - BHC32 - BH36 up to 8000 rpm.



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



## BPAD

Wi-Fi control console for performing the key functions required during the preparation of the working area and the tooling of the working units and tool holder warehouses.

The bPad is a valuable tool for supporting teleservicing, courtesy of the camera and bar code reader functions.



## BTOUCH

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 bSuite 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.

**BPAD AND BTOUCH ARE AN OPTIONAL FEATURE WHICH CAN ALSO BE BOUGHT AFTER PURCHASING THE MACHINE, IN ORDER TO IMPROVE THE FUNCTIONALITY AND APPLICATION OF THE TECHNOLOGY AVAILABLE.**

# 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



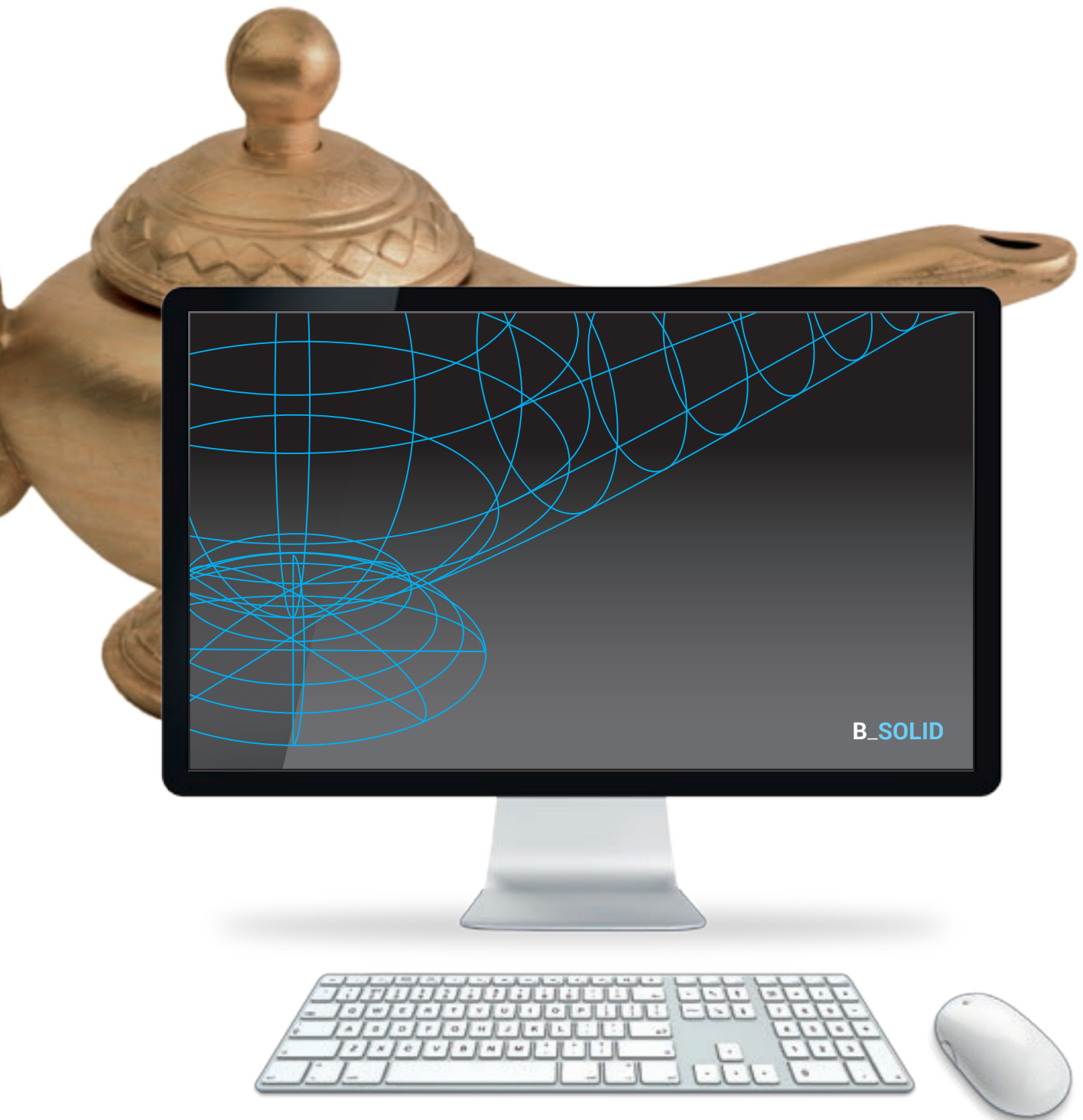
**B\_SOLID IS A 3D CAD CAM SOFTWARE PROGRAM THAT SUPPORTS THE PERFORMANCE OF ANY MACHINING OPERATION THANKS TO VERTICAL MODULES DESIGNED FOR SPECIFIC MANUFACTURING PROCESSES.**

- 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.





# B\_SOLID



# 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.**

- ▣ Reduced production costs.
- ▣ Simplified work for the operator.
- ▣ Integration with company software.





# IDEAS TAKE FORM AND SHAPE



**B\_CABINET IS A UNIQUE SOLUTION FOR MANAGING FURNITURE PRODUCTION FROM THE 3D DESIGN PHASE TO PRODUCTION FLOW MONITORING.**

**IT'S NOW POSSIBLE TO PLAN THE DESIGN OF A SPACE AND QUICKLY PASS FROM CREATING THE SINGLE ELEMENTS TO GENERATING PHOTO-REALISTIC CATALOGUE IMAGES, FROM GENERATING TECHNICAL PRINTS TO PRODUCING REQUIREMENT REPORTS, AND ALL IN ONE SINGLE ENVIRONMENT.**

**B\_CABINET FOUR (SUPPLEMENTARY MODULE) MAKES IT EASY TO MANAGE ALL THE WORK PHASES (CUTTING, MILLING, BORING, EDGEBANDING, ASSEMBLY, PACKAGING), JUST WITH A CLICK.**

**B\_CABINET FOUR INCLUDES AN ENVIRONMENT DEDICATED TO THE REAL TIME MONITORING OF THE PROGRESS OF THE PRODUCTION PHASES. THAT MEANS COMPLETE CONTROL OF THE ORDER STATUS, STEP BY STEP, THANKS TO CHARTS AND 3D IMAGES.**

# B\_CABINET



# SOPHIA

GREATER VALUE FROM MACHINES



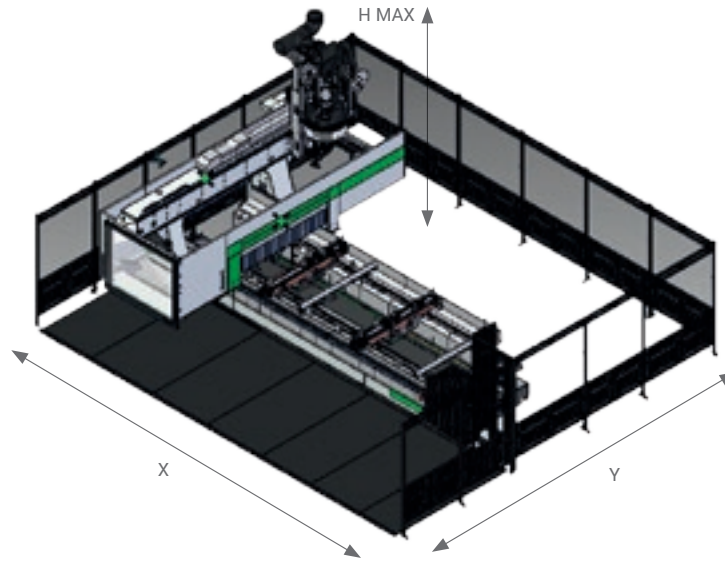
SOPHIA is the IoT platform created by Biesse in collaboration with Accenture which enables its customers to access a wide range of services to streamline and rationalise their work management processes.

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 axles
ROVER C 1638 FT	mm	8121	6547	8361	6530	3370
ROVER C 1665 FT	mm	11027	6547	11267	6530	3370
ROVER C 1938 FT	mm	8121	6567	8361	6530	3370
ROVER C 1965 FT	mm	11027	6567	11267	6530	3370
ROVER C 2248 FT	mm	9320	7120	9574	7064	3370

## WORKING FIELDS

		X	Y	Z
ROVER C 1638 FT	mm	3765	1560	400 / 500
ROVER C 1665 FT	mm	6450	1560	400 / 500
ROVER C 1938 FT	mm	3765	1875	400 / 500
ROVER C 1965 FT	mm	6450	1875	400 / 500
ROVER C 2248 FT	mm	4801	2205	400 / 500

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.

A weighted sound pressure level (LpA) during machining for operator workstation on vane-pump machine Lpa=79dB(A) Lwa=96dB(A) A-weighted sound-pressure level (LpA) for operator workstation and sound power level (LwA) during machining on cam-pump machine Lwa=83dB(A) Lwa=100dB(A) K measurement uncertainty dB(A) 4.

The measurement was carried out in compliance with UNI EN 848-3:2007, UNI EN ISO 3746: 2009 (sound power) and UNI EN ISO 11202: 2009 (sound pressure levels at workstation) during panel machining. 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.

# SERVICE & PARTS

Direct, seamless co-ordination of service requests between Service and Parts. Support for Key Customers by dedicated Biesse personnel, either in-house and/or at the customer's site.

## BIESSE SERVICE

- ✔ Machine and system installation and commissioning.
- ✔ Training centre dedicated to Biesse Field engineers, subsidiary and dealer personnel; client training directly at client's site.
- ✔ Overhaul, upgrade, repair and maintenance.
- ✔ Remote troubleshooting and diagnostics.
- ✔ Software upgrade.

**500**

Biesse Field engineers in Italy and worldwide.

**50**

Biesse engineers manning a Teleservice Centre.

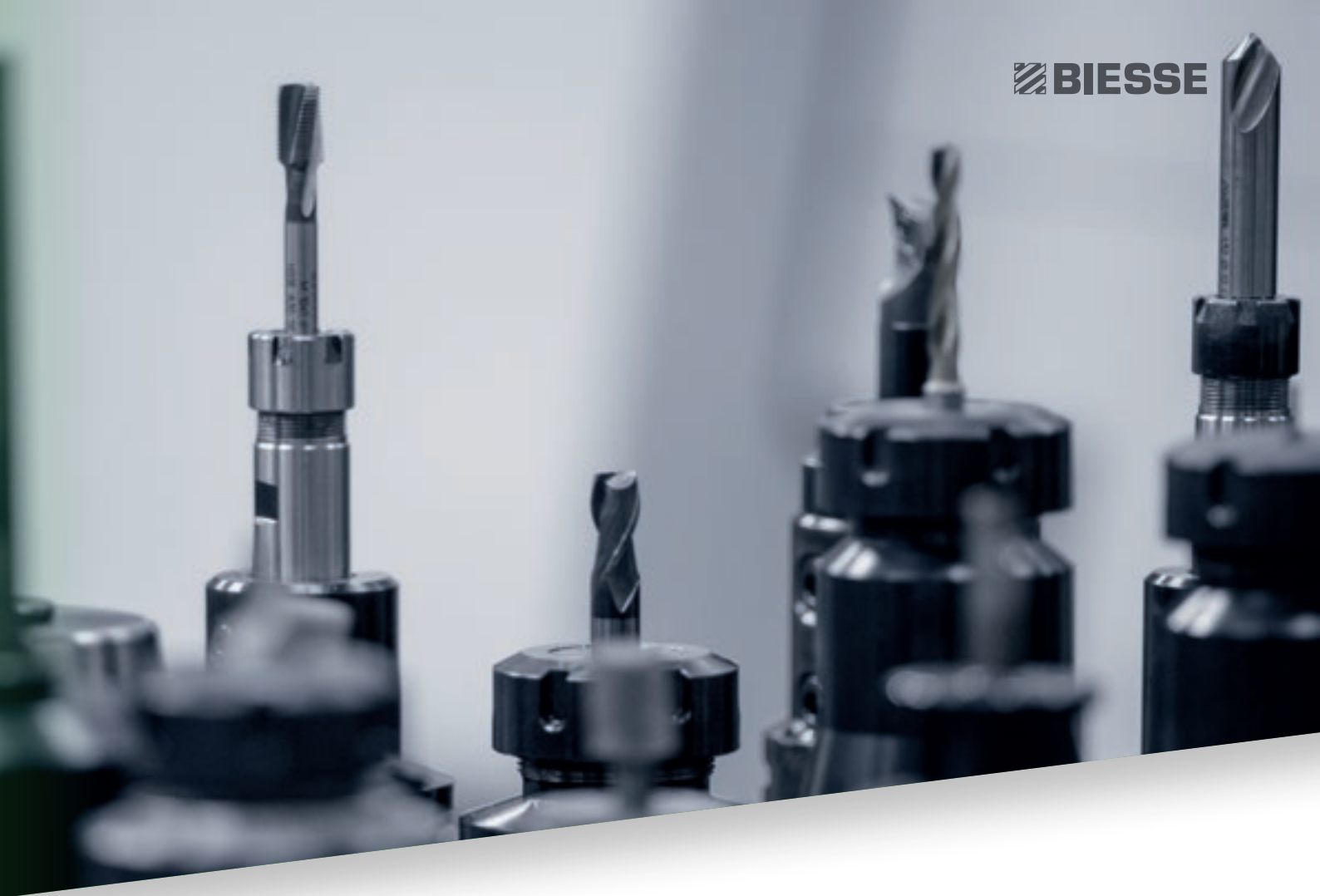
**550**

certified Dealer engineers.

**120**

training courses in a variety of languages every year.



A close-up photograph of several metal drill bits and tool components, arranged in a row. The bits are of different sizes and designs, some with black coatings. The background is a soft, out-of-focus grey.

The Biesse Group promotes, nurtures and develops close and constructive relationships with customers in order to better understand their needs and improve its products and after-sales service through two dedicated areas: Biesse Service and Biesse Parts. With its global network and highly specialized team, it offers technical service and machine/component spares anywhere in the world on-site and 24/7 on-line.

## BIESSE PARTS

- ✔ Original Biesse spares and spare kits customized for different machine models.
- ✔ Spare part identification support.
- ✔ Offices of DHL, UPS and GLS logistics partners located within the Biesse spare part warehouse, with multiple daily pick-ups.
- ✔ Order fulfillment time optimized thanks to a global distribution network with de-localized, automated warehouses.

**92%**  
of downtime machine orders fulfilled  
within 24 hours.

**96%**  
of orders delivered in full on time.

**100**  
spare part staff in Italy and worldwide.

**500**  
orders processed every day.

# MADE WITH BIESSE

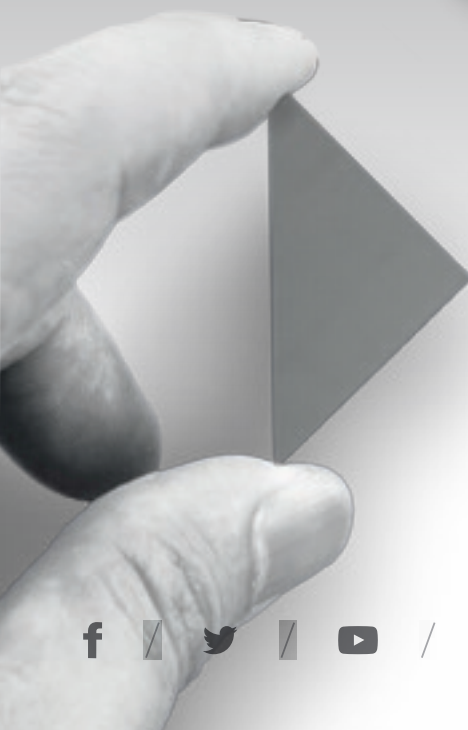
## THE SAGRADA FAMILIA SITE BETS ON BIESSE

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

BIESSEGROUP.COM



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.**



**BIESSEGROUP**

