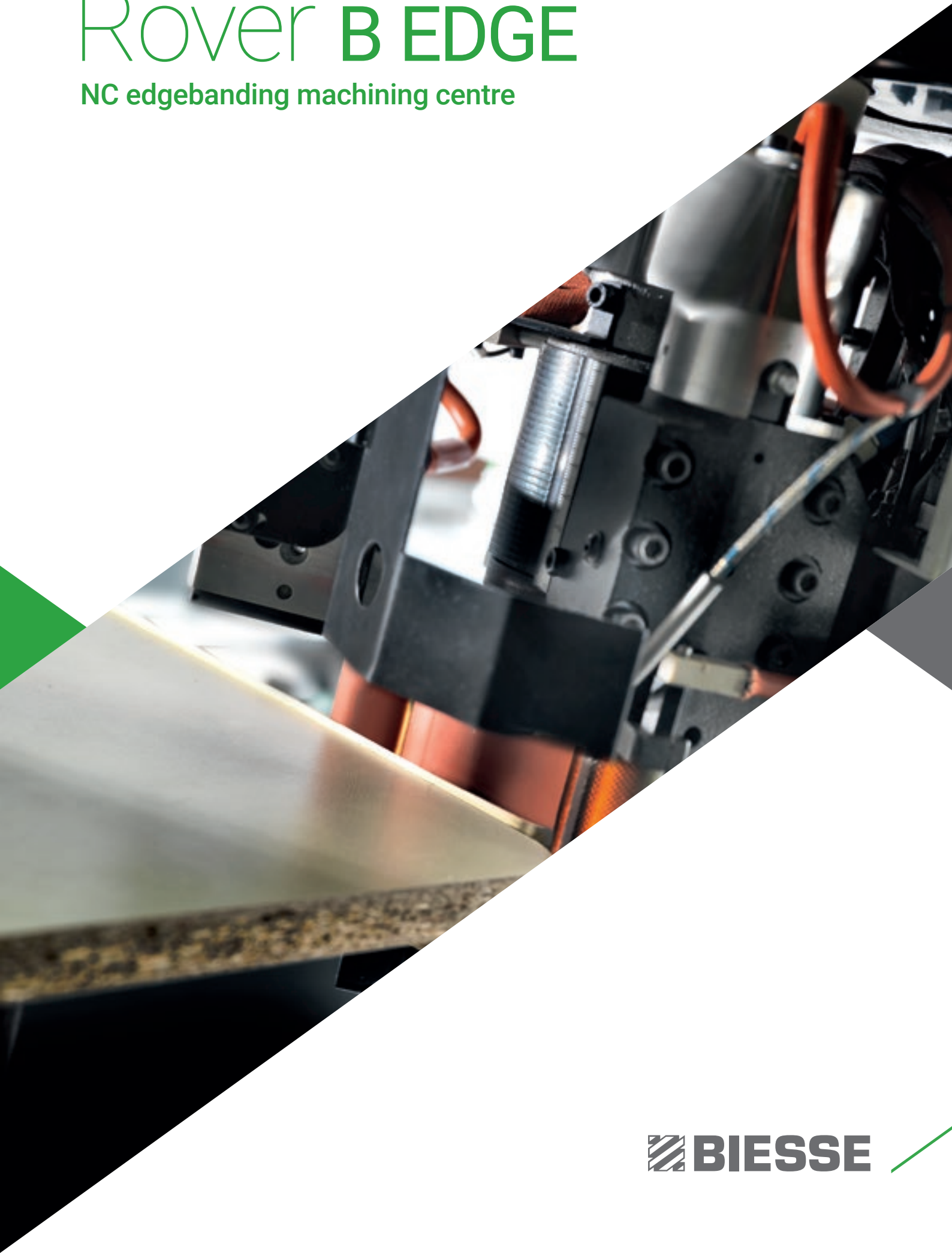


# Rover B EDGE

NC edgebanding machining centre



When competitiveness  
means maximum  
productivity, even with  
the most complex  
machining  
operations



Made **In** Biesse

## The market demands

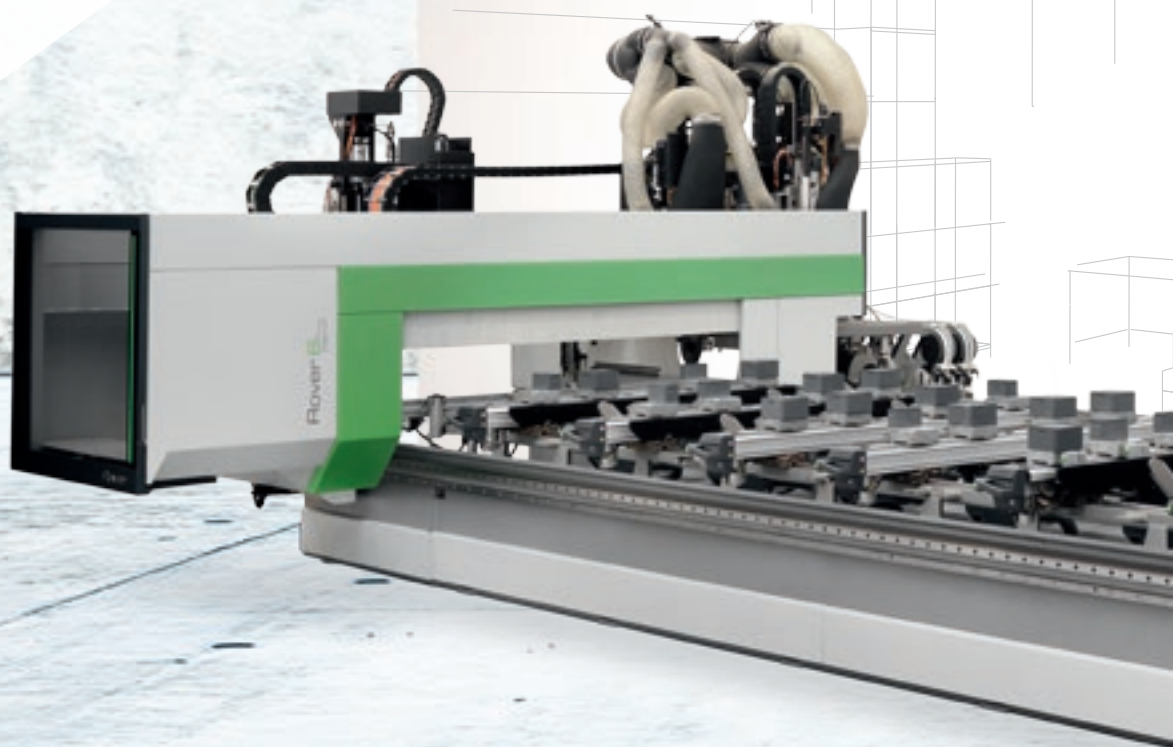
The market demands a change in manufacturing processes, enabling companies **to accept the largest possible number of orders**. This is coupled with the need to maintain high quality standards whilst offering product customisation with quick and defined delivery times, as well as responding to the needs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

## Biesse meets these requirements

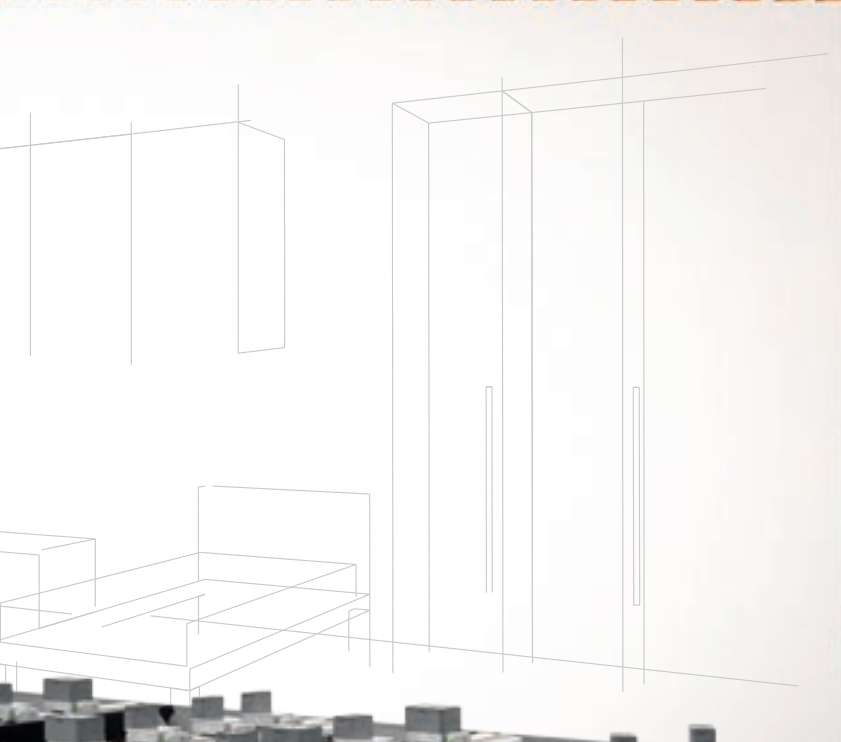
Biesse meets these requirements **with technological solutions** that enhance and support technical expertise as well as process and material knowledge. Edgebanding machining centres from the **Rover B Edge** range allow users to carry out machining operations to shape and edgeband panels on a single machine. The wide range of sizes, availability of working units and technologies, means that the Rover B Edge is ideal for medium to large as well as prototype production environments.

- ▶ **Unique technological solutions for optimal performance.**
- ▶ **Optimal edge grip.**
- ▶ **Full workability with large panels.**
- ▶ **Reduced tool changeover time.**
- ▶ **Optimal finish quality.**
- ▶ **High-tech becomes accessible and intuitive.**

# Working centres for shaped edgebanding



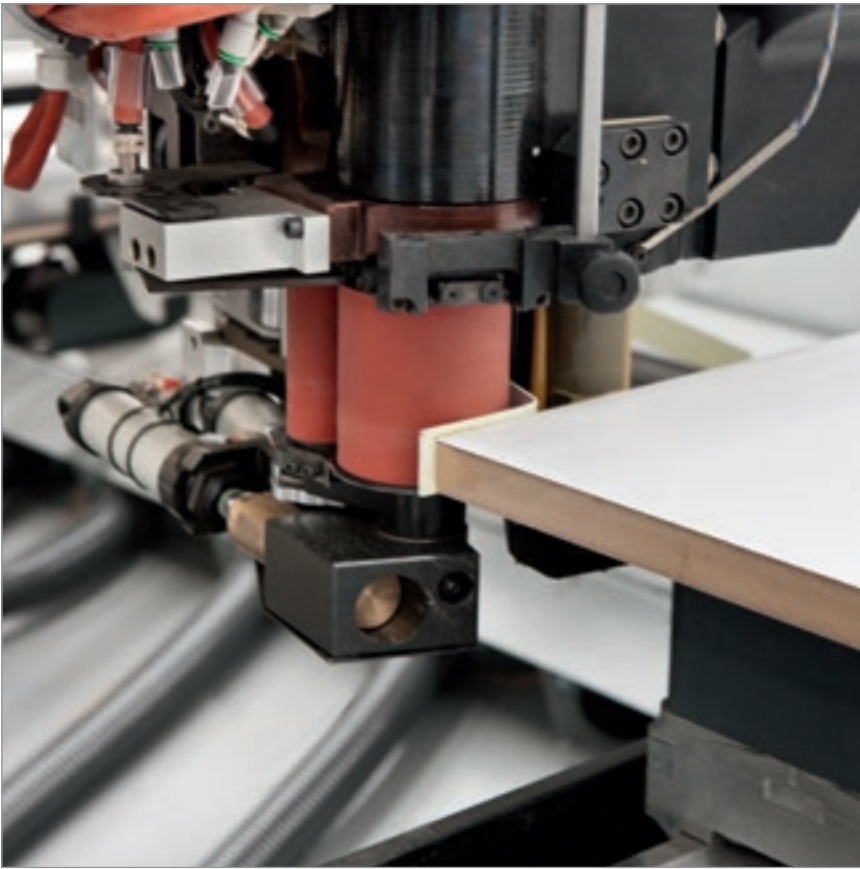
**Rover B EDGE**  
NC edgebanding machining centre



# Higher standards on any application

Rover B Edge allows you to carry out a wide range of operations on a single machine, ensuring quality, precision and absolute reliability over time.





# Unique technological solutions for optimal performance

**5 customisable configurations for the widest range of production needs.**



Technological solutions designed to meet the needs of flexible production without sacrificing productivity. The combination of 5 axis together with 4 axis electrospindles allows the processing of many types of components.



5-axis operating section of 16.5 kW, designed for solid wood. Greater power and rigidity for using large tools and carrying out heavy-duty removal operations.

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



A team of specialised sales engineers can understand production requirements and suggest the optimal machine configuration.



3 or 4 axis configuration allows for the processing of all types of furniture elements, with a minimal investment.



The combination of 4 axis electrospindles allows for flexible production whilst maintaining high rates of productivity.

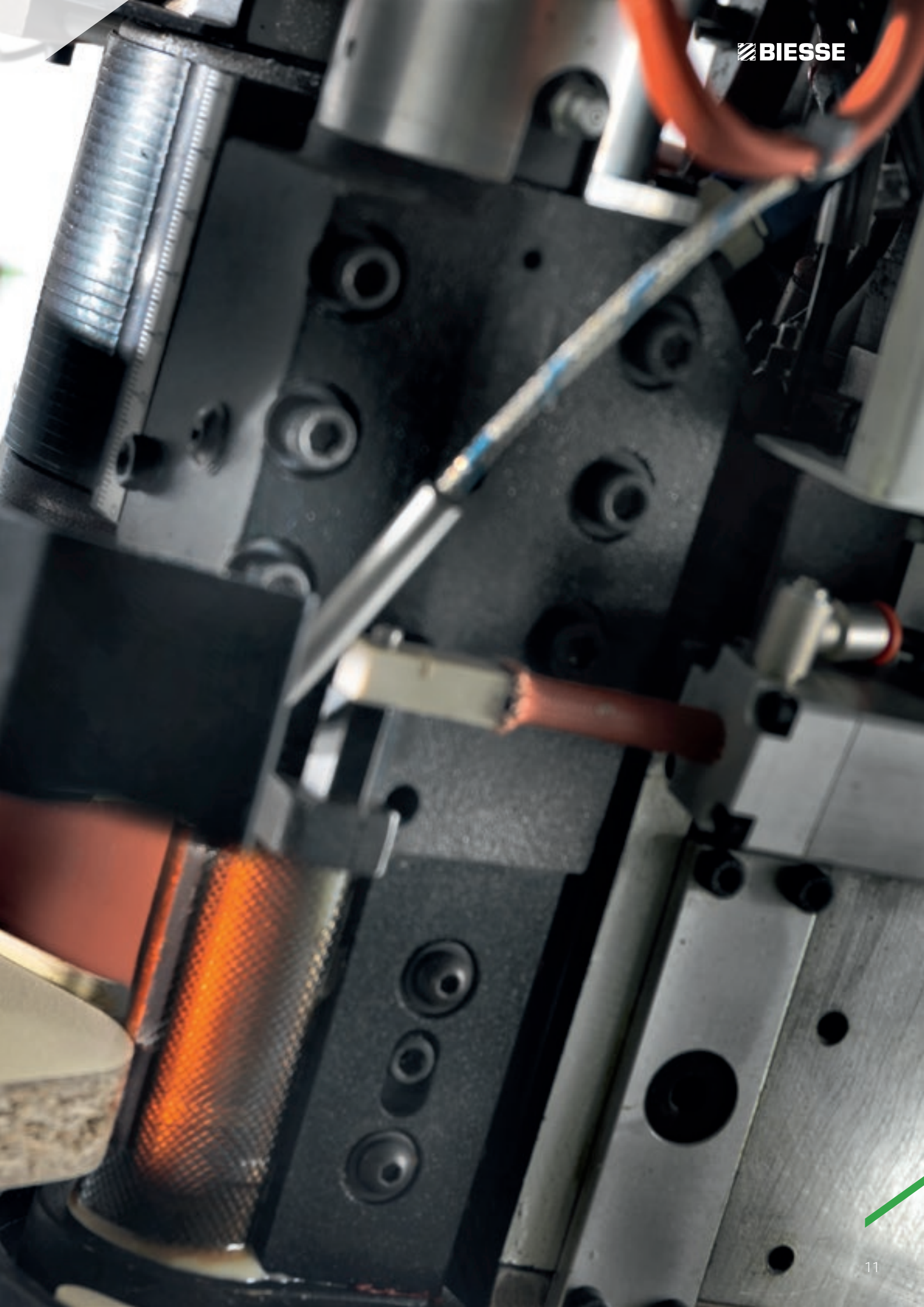
This configuration is designed for optimum productivity. Simultaneous machining of two pieces in milling and boring is possible. Tool change can occur while the machine is running.

# Robust edgebanding

Edgebanding has always been based on applying glue directly to the panel; Biesse has followed this principle and applied it to straight edgebanding as well as shaped edgebanding performed by machining centres.

## ROVER EDGE

Maximum bonding, possibility of applying thin edges and 3D transparent edges, easy maintenance and panel cleaning during the machining cycle. A perfect combination of Biesse technology and Italian genius.



# Optimal edge grip

Optimal edge pressure quality during gluing on shaped panels thanks to the twinroller edge pressure system.



Similar to straight line edgebanding machines, **the glue is applied directly onto the panel** in order to ensure optimal adhesion quality. It supports the use of thin or transparent (3D) edges, as well as thicker and sturdier edges.



**Glue feed** occurs during the machining process via the granule feeding system within in integrated glue head. With the glue being stored in granules, only the required quantity is released for melting. This ensures optimal adhesion whilst preserving the glue characteristics.

# Firm, stable adhesion



**Biesse offers specific solutions for the use of polyurethane glues resistant to heat, humidity and water.**



Nordson pre-melter for high production needs. An exclusive direct injection system for non-stop machining operations at high speed and consumption levels.

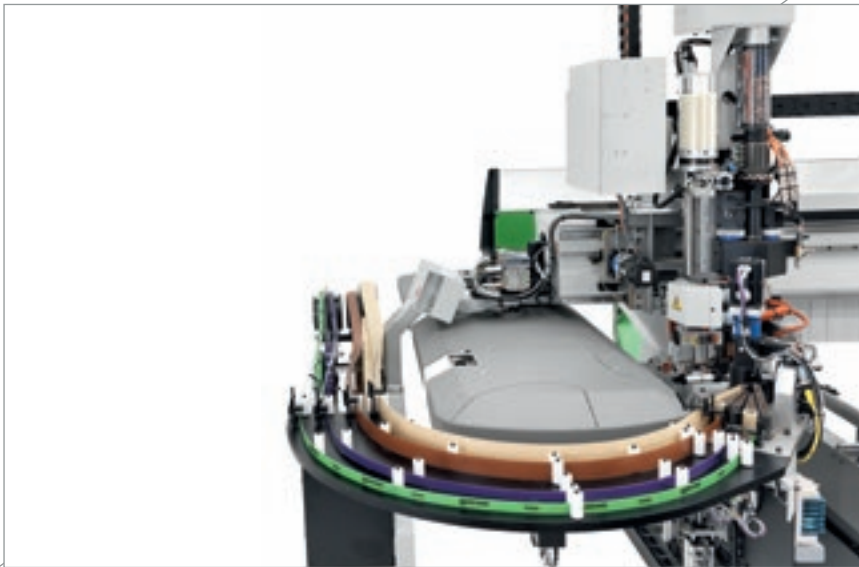


Presser roller quick changeover kit with reduced diameter version. This ensures the correct pressure is delivered when switching from thick to thin edges as well as small radius curves.



Additional glue pots fitted with quick-release electrical system for PU granule adhesives.

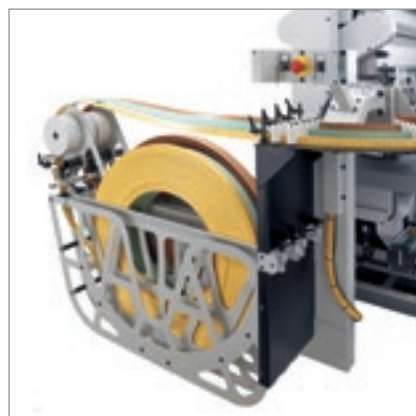
# Solutions that increase machine productivity



The automatic edging feeder, mounted on the X carriage, allows the user to change between thin or thicker edges during the same machining cycle.

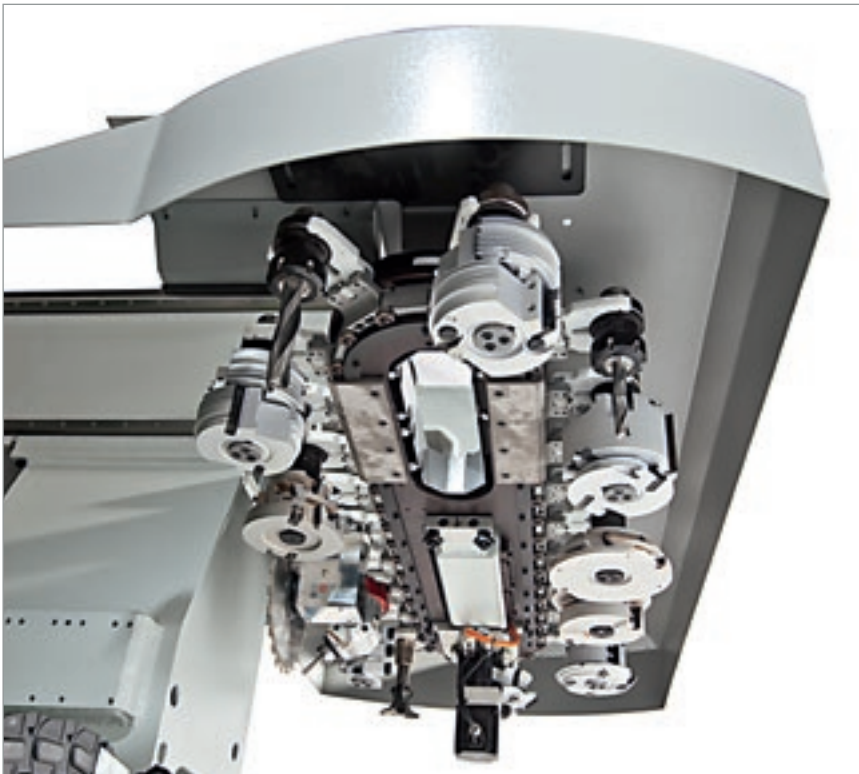


Quick change of the coils with the banding material container positioned outside the safety fences.



Thin or thick edges, either pre-cut or coiled, with automatic or manual feeding.

The machine can house up to 41 aggregates and tools.



It is possible to switch from one machining operation to the next with no need for operator intervention for tool changes, thanks to the large number of tools and aggregates available in the tool magazine.



Quick and easy drill change due to the exclusive spindle snap-on coupling system.

# Many solutions for perfect finishes



Edgebanding strip finishing aggregate with three functions. High feed and rotation speed, up to 14000 rpm. Particularly suitable for machining panels with a delicate or glossy surface, or with a protective film.

Finishing aggregates for edgebanding operations.



A complete range of aggregates for all machining operations.





Maximum adhesion between the edgbanding strip, glue and panel, and optimum finish.



Blower and anti-adhesive liquid dispensing aggregate.



Brusher aggregate with glue removal liquid dispenser.



Cold or hot air blower unit to brighten up the colour of the edgbanding strip.



Blower unit.



4-outlet blower unit for edgbanding strip finishing aggregates.

# Practical design

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.

## BIESSE IDENTITY

An innovative yet simple design is the hallmark of Biesse's distinctive identity. The perfect combination of Italian genius and taste.

ROVER

# Maximum working precision maintained over time

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



↙ Rigidity and lack of vibration ensures consistent and reliable quality of machined components.



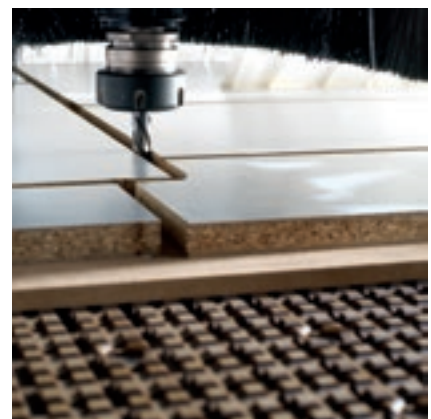
↙ The double X-axis motorisation supports high speeds and accelerations whilst ensuring high quality finish and precision.

# Full workability with large panels

The rigid structure of the machine and the width of the Y axis allows users to machine panel widths of up to 2208 mm with all available tools.



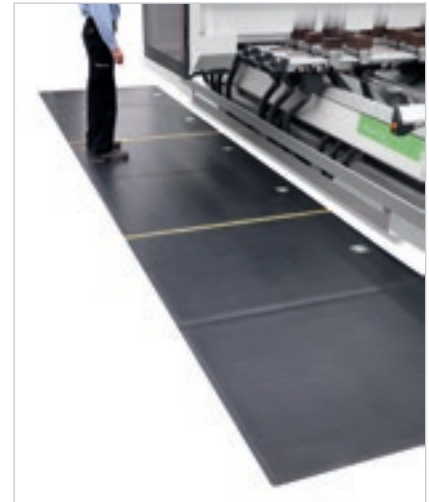
Choose from a comprehensive range of bed sizes to facilitate the machining of all panel sizes.



Two machines in one: the full functionality and quality of a true pantograph table are guaranteed by the CFT (Convertible Flat Table), which supports the machining of thin panels, nesting and folding

# Maximum operator safety

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



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



Side curtain guards to protect the working unit, which are movable 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.



# Optimal cleaning of machined components and work area



**Motorised conveyor belt** for the removal of chips and waste.



NC controlled chip **deflector**.



6-position (for 4 axes) and 13-position (for 5-axes) adjustable suction hood with deflector (chip conveyor) managed via NC.

# 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.

# High-tech becomes accessible and intuitive



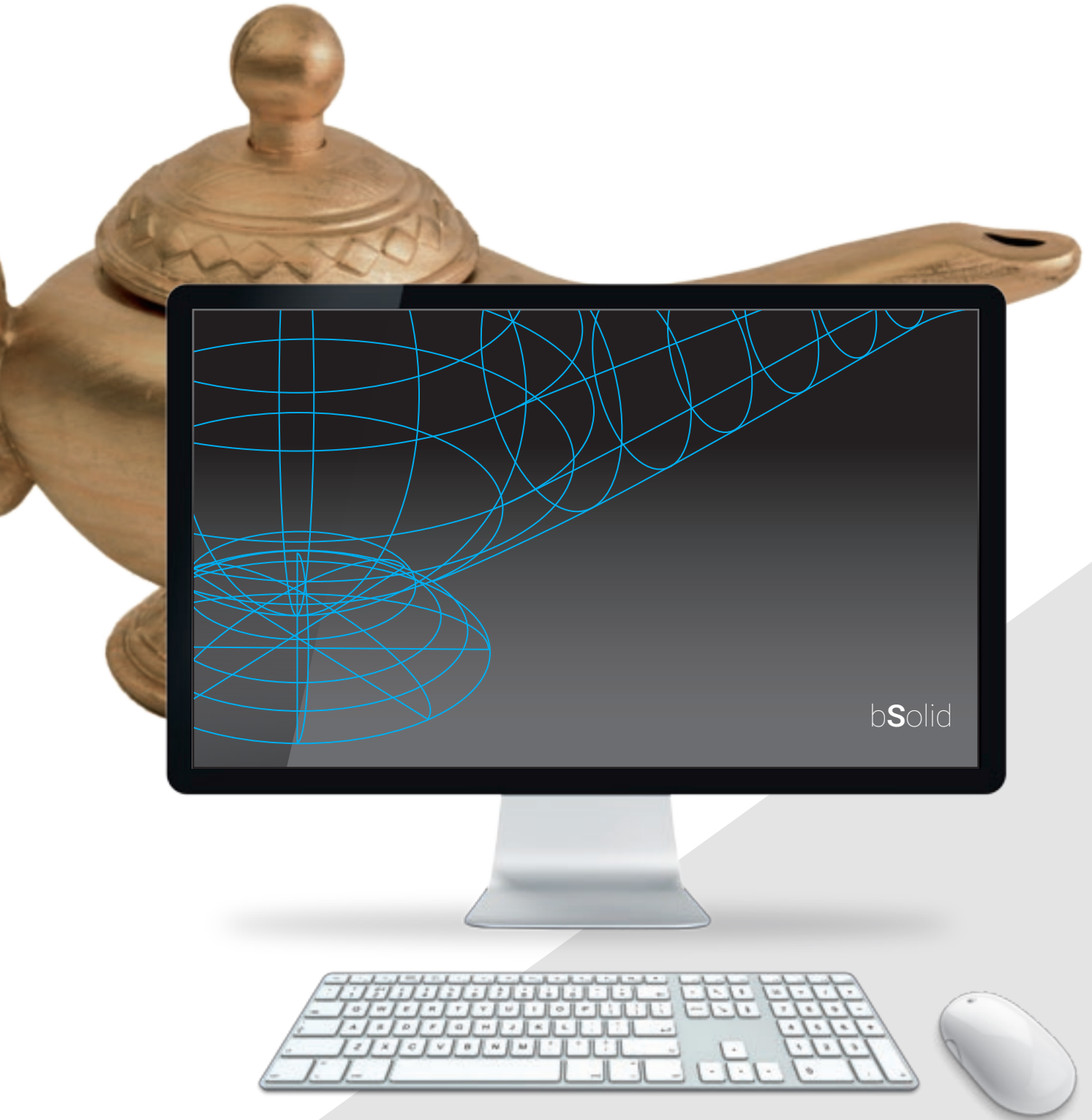
**bSolid** is a 3D cad cam software program that supports the performance of any machining operation thanks to vertical modules designed for specific manufacturing processes.

- ▶ **Planning in just a few clicks, with endless possibilities.**
- ▶ **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.**

Watch the **bSolid** ad at: [youtube.com/biessegroup](https://youtube.com/biessegroup)



bSolid



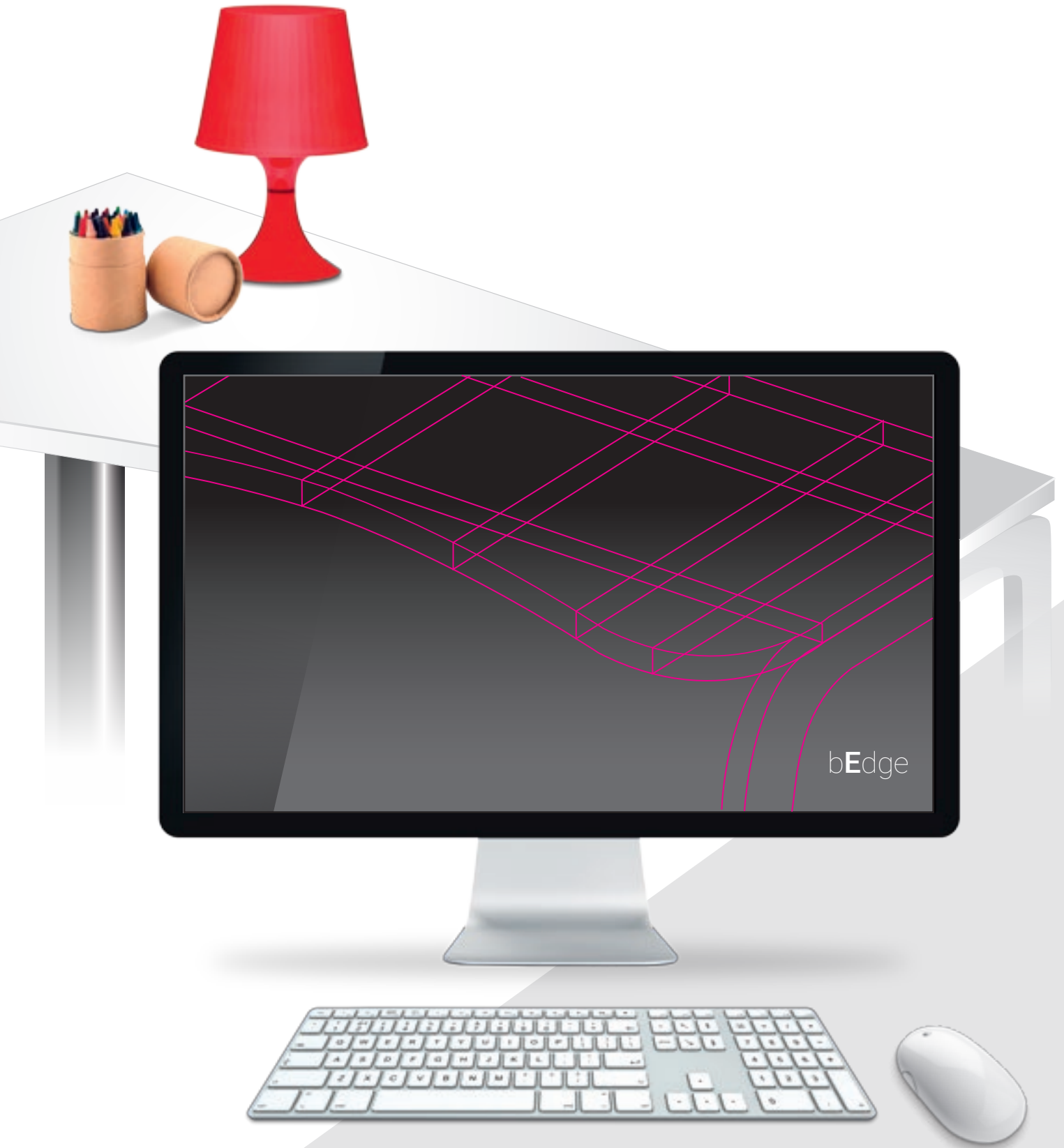
# Simplifying edgebanding programming



**bEdge** is a bSuite plug-in, seamlessly integrated for edgebanding planning. By utilising bSuite's design and simulation capabilities, bEdge makes edgebanding even the most complex shapes, very simple.

- ▶ **Automatic generation of the edgebanding operation sequence.**
- ▶ **Easy to understand and operate.**
- ▶ **Simplified management of edgebanding aggregates.**

bEdge



# Ideas take form and shape



**bCabinet** is the bSuite plugin for furniture design. It allows users to develop designs for a given space, and to quickly identify the individual elements that make it up.

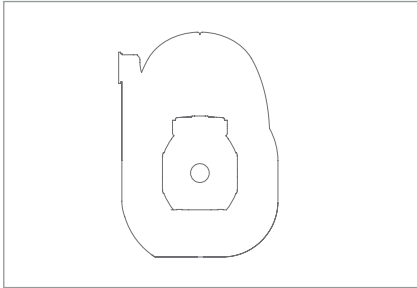
- ▶ **With the new plugin, it is easy to draw both individual items of furniture and complete furnishings for a range of spaces.**
- ▶ **Offering optimal integration with bSuite, users can move from design to manufacturing in just a few clicks.**
- ▶ **Total control and maximum optimisation of the furniture design and creation process, to achieve the highest levels of efficiency.**

# bCabinet

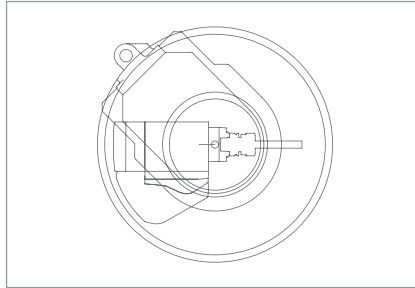


bCabinet

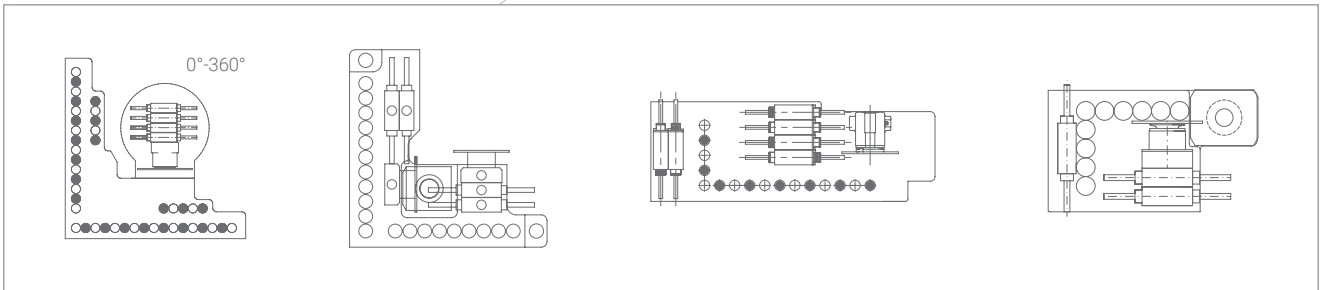
# Working unit configuration



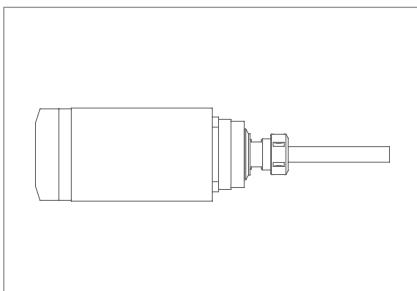
Milling unit with air or liquid cooling, ISO 30, HSK F63 and HSK E63 couplings and power from 13.2 to 19.2 kW.



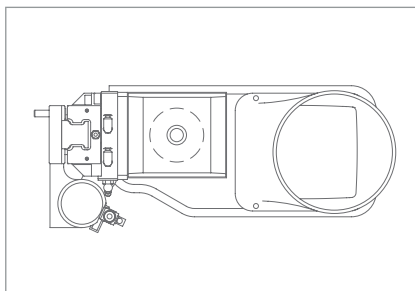
5 axes 13 kW with 24000 rpm or 16 kW with 18000 rpm.



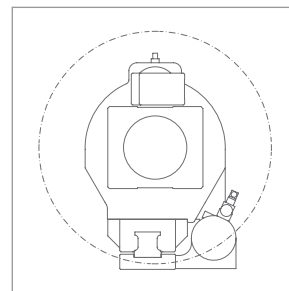
Boring heads available from 9 to 42 spindles: TCH9L, BH17L, BH29L, BH30 2L, BHC42.



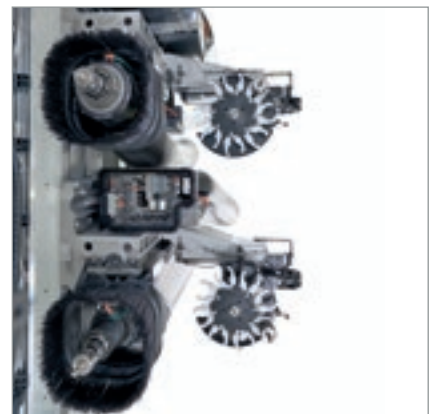
1 outlet horizontal milling units.



6 kW vertical milling unit.



Multi-function, with 360° rotation.





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



New **C Torque axis**: more precise, quicker, more rigid.



The new **BH30 2L boring head** is equipped with automatic lubrication and a metal dust extraction cover which, together with liquid cooling guarantees maximum precision and long term reliability.



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



Horizontal motor with one outlet for lock routing and horizontal machining operations.



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.

# Loading and unloading solutions

## Automated cell for machining a batch of panels or doors.

**Synchro** is a handling device with 4 controlled axes which are actioned by the Rover machining centre. It collects the panels to be machined from a stack, positions them in reference to a point of origin provided by the machining centre and, once the machining operation is complete, deposits them in an area designed to accommodate the stack of machined panels. The working cycle is executed in automatic mode until the entire batch to be processed is complete.



### Device for the removal of porous panels or those with special finishes

It increases the reliability and the repeatability of the automatic cell operation cycle, even when machining porous materials or those with special finishes, which are often supplied with a protective film.



### 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.



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.

Synchro can be positioned to the left or right of the machining centre.  
Flow of materials that are consistent with the customer facility production cycle.

- ▶ Prevents damage caused by manual handling of materials;
- ▶ extremely simple user interface, integrated into the machining centre programming functions.

# Service 4.0

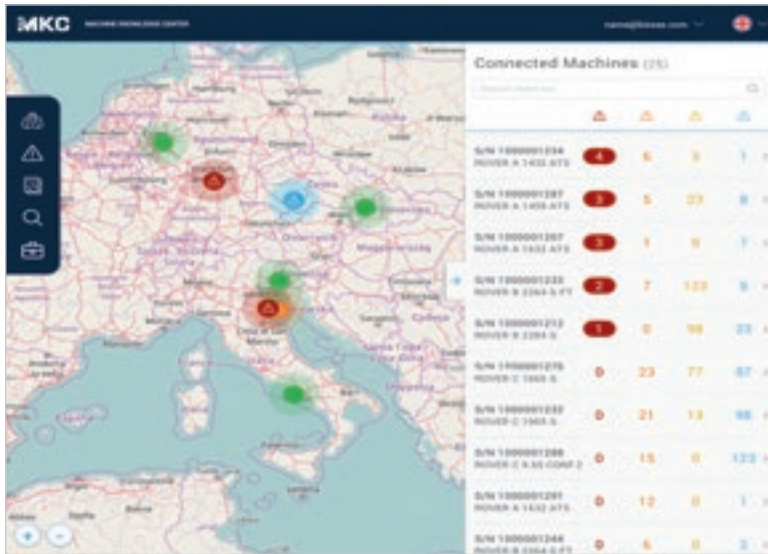
Biesse has developed a wide range of services to enhance machine performance and customer productivity, improving operational efficiency and lowering costs.

Sensors and devices fitted onto machines enable in-depth analyses to be carried out and viewed via control panels for mobile devices.



## CNC IoT Biesse Service Pack

- ▶ Priority service and extended coverage.
- ▶ Continuous connection with the Biesse control centre.
- ▶ Direct monitoring of machine performance through a dedicated app.
- ▶ Analysis of machine stoppages, remote diagnostics and fault prevention.
- ▶ On-site functional check and technical inspection within the warranty period.



Machine monitoring screen connected to the Biesse control centre.



Control screen displaying machine details.

### The direct connection with Biesse provides a range of significant benefits

- ▶ Optimisation of efficiency and of operating quality.
- ▶ Net reductions in repair times.
- ▶ Better accuracy in predicting machine stoppages.
- ▶ Remote software updates.

**60 minutes** maximum time taken to deal with an instance of machine stoppage.

**80%** reduction in the time required for the diagnostics process.

Overall reduction in downtime of **50%**.

# 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.


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 specialised 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 customised 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 fulfilment time optimised thanks to a global distribution network with de-localised, automated warehouses.

87%  of downtime machine orders fulfilled within 24 hours.

95%  of orders delivered in full on time.

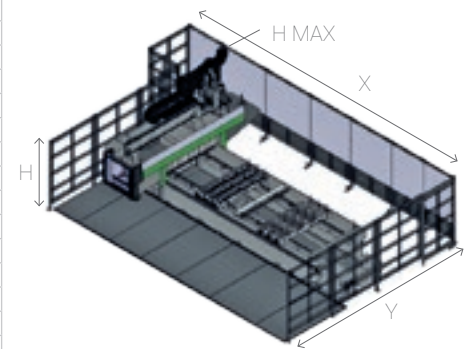
100  spare part staff in Italy and worldwide.

500  orders processed every day.

# Technical specifications

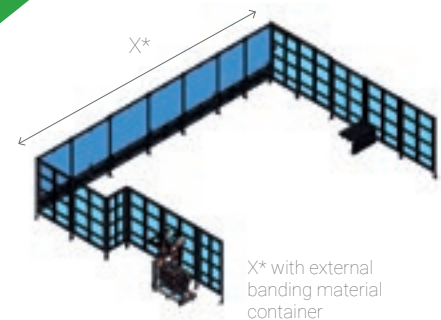
## Working fields

		X1 milling	Y1 milling	X2 edgebanding	Y2 edgebanding	Z1 milling modules H74	Z2 milling modules H29
Rover B Edge 1638	mm	3855	1600	2900	1600	245	290
	inches	151,8	63,0	114,2	63,0	9,6	11,4
Rover B Edge 1660	mm	5055	1600	4100	1600	245	290
	inches	199,0	63,0	161,4	63,0	9,6	11,4
Rover B Edge 1667	mm	6735	1600	5780	1600	245	290
	inches	265,2	63,0	227,6	63,0	9,6	11,4
Rover B Edge 1684	mm	8415	1600	7460	1600	245	290
	inches	331,3	63,0	293,7	63,0	9,6	11,4
Rover B Edge 1650	mm	5055	1900	4100	1900	245	290
	inches	199,0	74,8	161,4	74,8	9,6	11,4
Rover B Edge 1667	mm	6735	1900	5780	1900	245	290
	inches	265,2	74,8	227,6	74,8	9,6	11,4
Rover B Edge 1984	mm	8415	1900	7460	1900	245	290
	inches	331,3	74,8	293,7	74,8	9,6	11,4
Rover B Edge 2250	mm	5055	2200	4100	2200	245	290
	inches	199,0	86,6	161,4	86,6	9,6	11,4
Rover B Edge 2267	mm	6735	2200	5780	2200	245	290
	inches	265,2	86,6	227,6	86,6	9,6	11,4
Rover B Edge 2284	mm	8415	2200	7460	2200	245	290
	inches	331,3	86,6	293,7	86,6	9,6	11,4



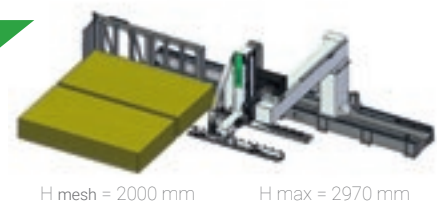
## Foot print

	X	X*	Y	H	H MAX
	mm	mm	mm	mm	mm
Rover B Edge 1638	8440	8680	5990	2000	2650
Rover B Edge 1650	9620	9860	5990	2000	2650
Rover B Edge 1667	11280	11520	5990	2000	2650
Rover B Edge 1684	12980	13220	5990	2000	2650
Rover B Edge 1950	9620	9860	6340	2000	2650
Rover B Edge 1967	11520	11280	6340	2000	2650
Rover B Edge 1984	12980	13220	6340	2000	2650
Rover B Edge 2250	9620	9860	6680	2000	2650
Rover B Edge 2267	11520	11280	6680	2000	2650
Rover B Edge 2284	12980	13220	6680	2000	2650



## Working table Syncro

	Min	Max
Length	mm 500	2500
Width	mm 200	1350
Thickness	mm 16	60
Weight	Kg -	100
Useful height of stack	mm -	1000
Height of stack from ground (including 145 mm Europallet)	mm -	1145



X/Y/Z axis speed	85/85/30 m/min
Edges thickness	0,4-3 mm
Panel thickness for edgebanding strip processing	10-60 mm
Available coils	02/04/06

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.



# Biesse CNC Edgbanding Range

## CNC - EDGEBANDING



ROVER A EDGE



ROVER B EDGE



ROVER C EDGE



EDGE LINE

# Made **With** Biesse

**Biesse Group technology supports the manufacturing efficiency of the world's largest furniture manufacturers.**

"We were looking for a solution that would be so innovative that it would satisfy all our needs at the same time," states the manufacturing manager of one of the world's largest furniture manufacturers.

"Most of our production was already made using numerical control tools, but now everything that we produce is made with these technologies.

This is why it was necessary to increase our production capacity. Biesse offered a solution that we liked very much, a ver-

itable range of processing centres and automatic magazines. Innovative, fascinating and decidedly powerful.

With Biesse we defined a "turnkey" solution to be planned, built, tested, installed, inspected and commissioned within a precisely defined schedule".

*Source: excerpt from an interview to the manufacturing manager of one of the world's largest furniture manufacturers.*



# Biesse Group

In / 1 industrial group, 4 divisions  
and 9 production sites.

How / € 14 million p/a in R&D  
and 200 patents registered.

Where / 37 branches and 300  
agents/selected dealers.

With / Customers in 120 countries (manufacturers of furniture,  
design items and door/window frames, producers of ele-  
ments for the building, nautical and aerospace industries).

We / 3,800 employees throughout the world.

**Biesse Group** is a multinational leader in the technology for processing wood, glass, stone, plastic and metal.

Founded in Pesaro in 1969, by Giancarlo Selci, the company has been listed on the STAR sector of Borsa Italiana since June 2001 and is currently a constituent of the FTSE IT Mid Cap index.

 **BIESSEGROUP**

 **BIESSE**

 **INTERMAC**

 **DIAMUT**

**MECHATRONICS**

