

 **BIESSE ROVER B**

NC processing centre



When competitiveness
means reliable
manufacturing



Made **In** Biesse

The market demands

a change in manufacturing processes, which will enable 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

with **technological solutions** that enhance and support technical expertise as well as process and material knowledge. **Rover B** is the machining centre designed for both skilled craftsmen and large-scale industry. Configurable and high-performance, it ensures a quality finish and is reliable under all working conditions.

- ✓ **5 customisable configurations for the widest range of production needs.**
- ✓ **Unique technological solutions for optimal performance.**
- ✓ **Reduced tool changeover time.**
- ✓ **Maximum working precision maintained over time.**
- ✓ **Full workability with large panels.**

Rapid return on investment



ROVER B

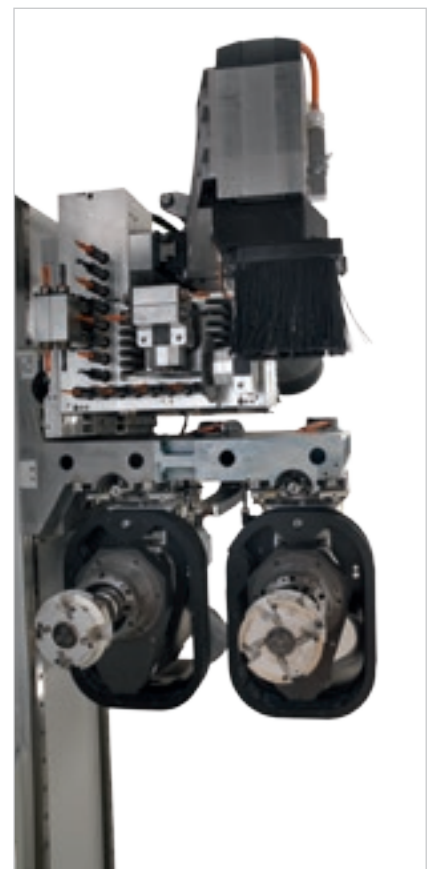


5 customisable configurations for the widest range of production needs

A team of specialised sales engineers 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 limited investment.



Configuration with 3 or 4 axis double electrospindle, for users who need to manufacture in large quantities, for optimised costs without sacrificing quality.



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.



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.



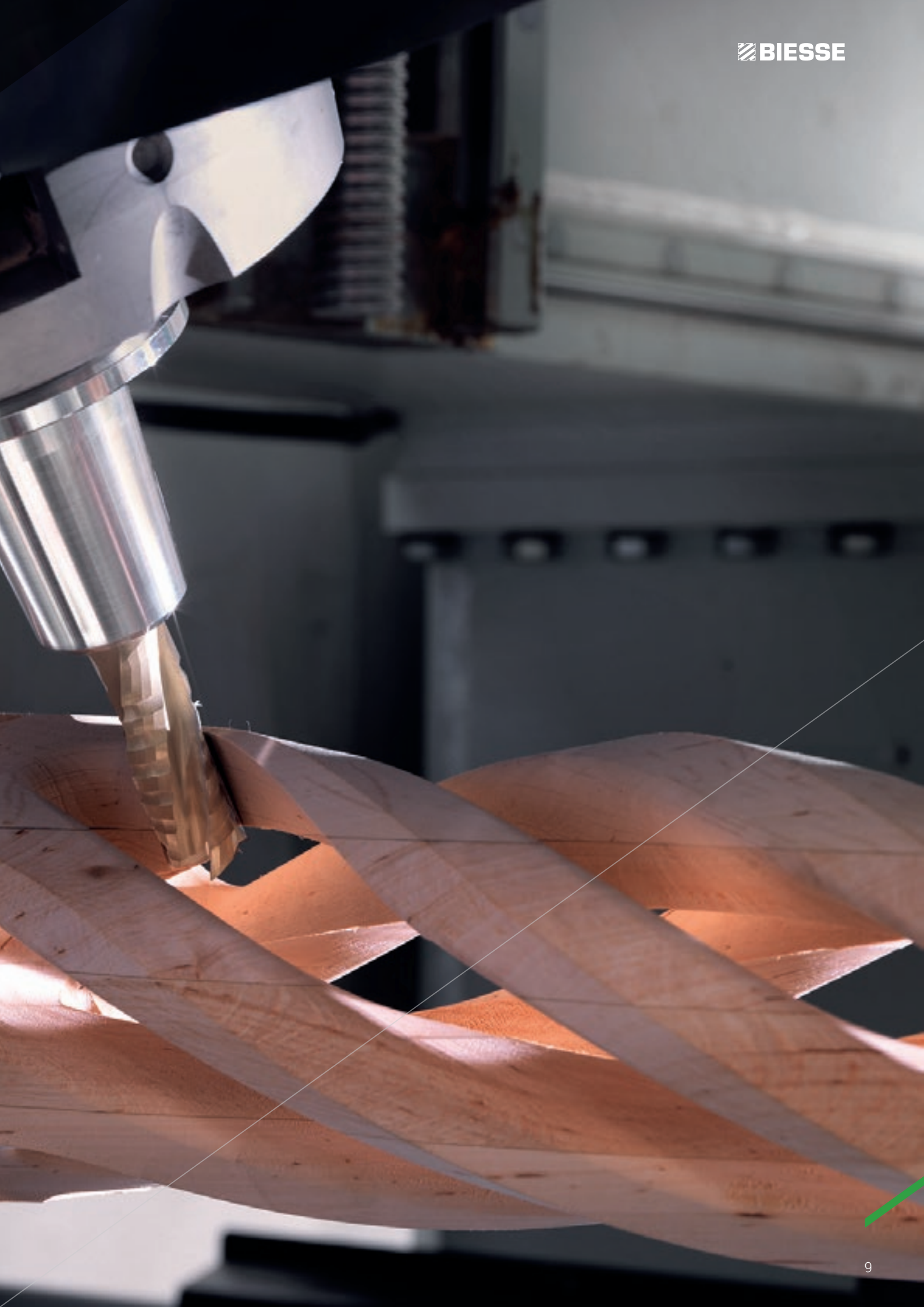
The combination of 5 axis together with 4 axis electrospindles allows for flexible production without sacrificing high rates of productivity.

User-friendly technology

The 5-axis operating head, equipped with 13 kW HSD spindle and with 360° continuous rotation on the vertical and horizontal axes, enables the machining of complex-shaped pieces ensuring quality, precision and absolute long term reliability.

5 AXES

The high technological content of the machining centres most widely sold in the world meets the requirements of wood industry professionals. A perfect combination of Biesse innovation and Italian genius.



Unique technological solutions for optimal performance

For an accessible investment, Rover B boasts technologies which are unique to the market.

2 Y-axes for maximum productivity in all machining operations. It is possible to machine two panels at the same time, and to change the tool while the machine is still running, ensuring that there is always a tool working on the product.



Technological solutions designed to meet the needs of flexible production without sacrificing productivity. **Independent Y axes** to perform tool changes on board the X carriage, using the maximum number of tools available on the machine without affecting cycle timings.



Reduced cycle times due to the ability to carry out **tool changes while the machine is still running, both on the chain magazine and on the revolvers.**



New 16.5kW **5-axis head** designed for solid wood machining. Increased power and rigidity for larger tools and heavier removals.



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.



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



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

Reduced tool changeover time

The Biesse work table is guaranteed to hold the work piece securely and ensures quick and easy changeover of pod and clamps.

Over 1,500 processing centres with EPS sold worldwide.



Hyperclamp for rigid and precise locking.



Pneumatic **Uniclamp**.



SA (Set Up Assistance)

The assisted set-up system, indicates to the operator where to position the panel, pods and rails to avoid potential collisions with the tool.

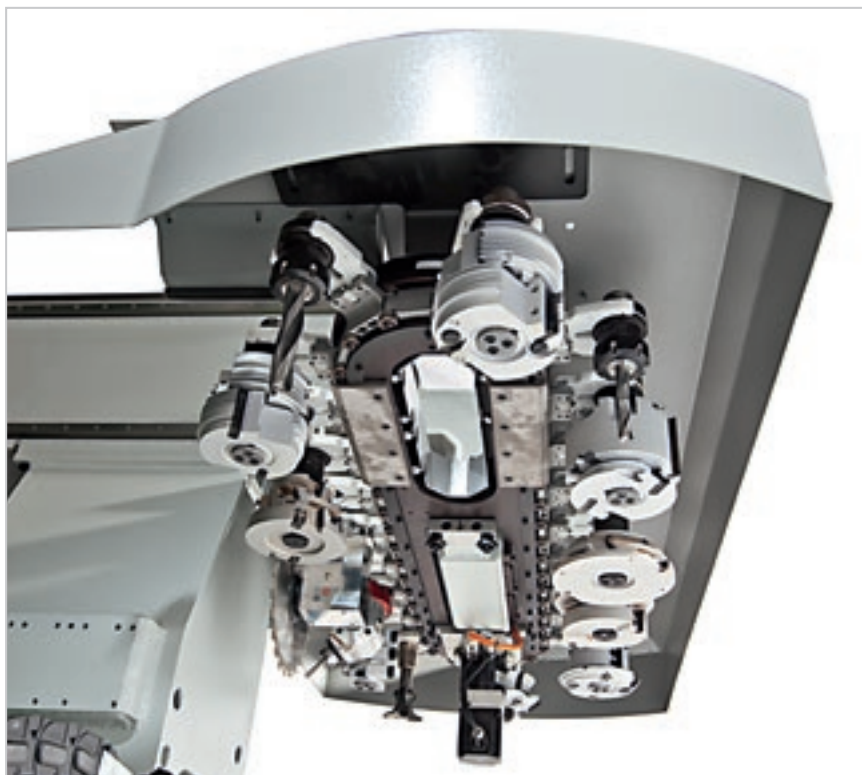


EPS (Electronic Positioning System)

allows for rapid automatic re-configuration of the entire work area. Positions work tables and pods by means of separate motors, i.e. without engaging the operating section. The positioning of the pod and rail is performed during machining, whilst the machine is working on the opposite area.



The machine can house up to 91 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.



The automatic pick up station allows easy loading and changing of tools in the tool magazines.



Easy access to the unit through the sliding door.



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

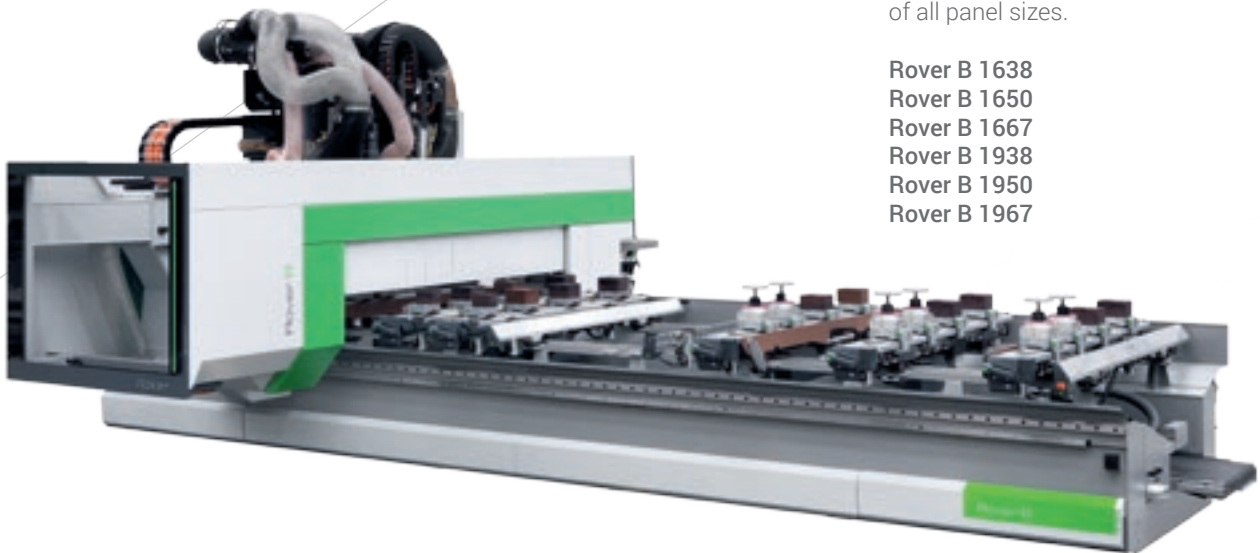
Full workability with large panels

The rigid structure of the machine and the width of the Y axis allows users to machine panels of up to 1930 mm with all available tools.



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

Rover B 1638
Rover B 1650
Rover B 1667
Rover B 1938
Rover B 1950
Rover B 1967



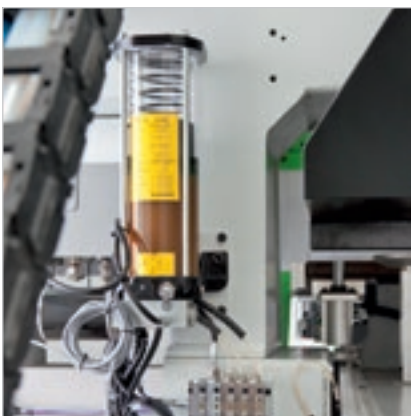
Two machines in one: the full functionality and quality of a true pantograph table are guaranteed by the **CFT (Convertible Flat Table)**, which supports the machining of thin panels, nesting and folding.

Maximum working precision maintained over time

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



Rigidity and absence of vibration ensures constant and reliable quality of the finished product.



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



The **double X-axis motorisation** supports high speeds and accelerations whilst ensuring high precision and quality of the finished product.

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.

BIESSEIDENTITY

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

The perfect combination of Italian genius and taste.

Rover

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**.

Loading and unloading solutions

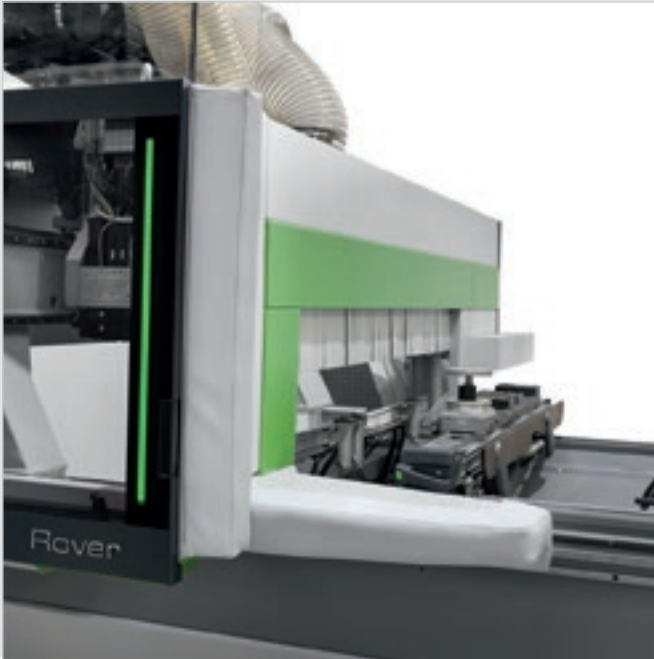
Biesse can provide bespoke solutions which are tailored to meet your specific productivity, automation and space requirements.



With the introduction of the **RBO Robot** range, Biesse further complements its range of customised products where flexibility and logistics are key elements in order to provide automated process solutions.



Maximum operator safety

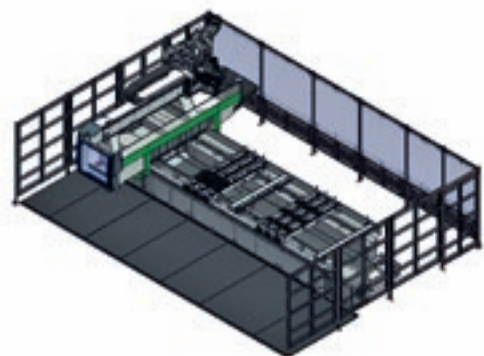


The machine is optimised for safety and flexibility with new bumpers and double photocells to maximise operator safety.



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

Perimeter guards with front access door.





22 overlaid layers of **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.



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 prior to manufacturing and provide 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



bSolid



Exceptional finish quality

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



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

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

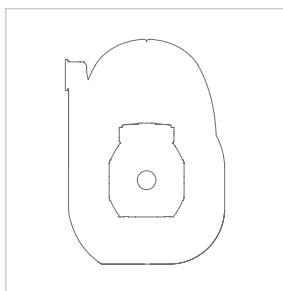


The new **BH30 2L boring head** is equipped with automatic lubrication and a metal dust extraction cover which, together with liquid cooling guarantees maximum precision and long term reliability.

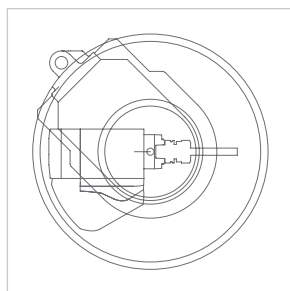
A complete range of aggregates for all machining types.



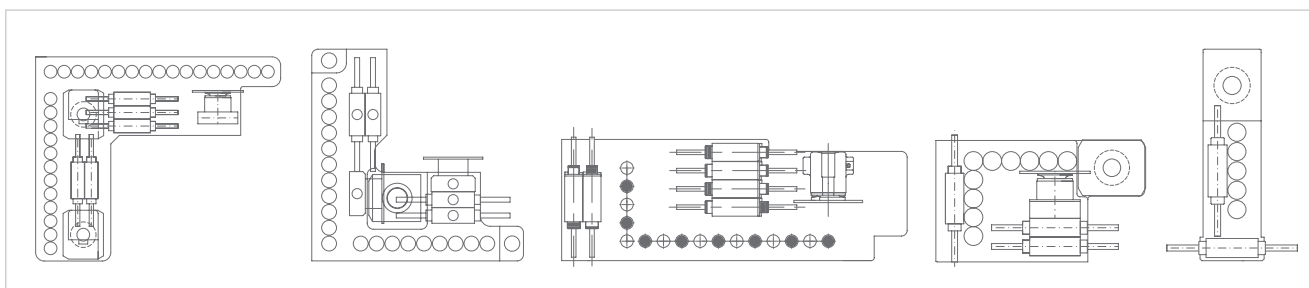
Working unit configuration



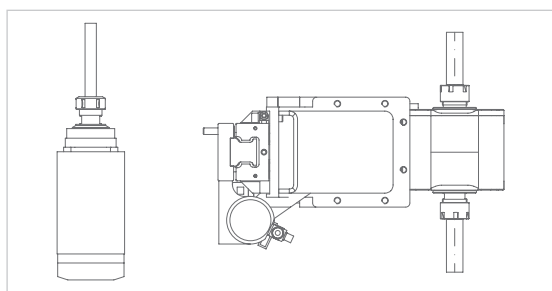
Electrospindle with air or liquid cooling and power options of up to 19.2 kW.



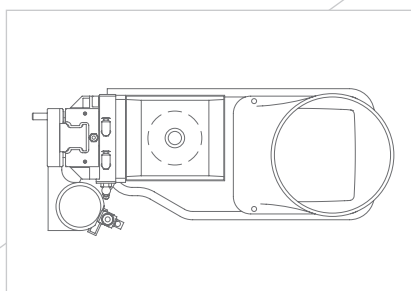
5-axis head with 13 to 16.5 kW power options.



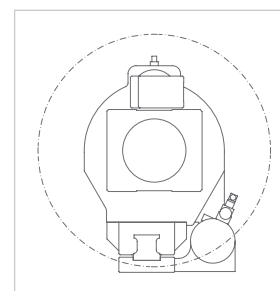
Available boring heads from 9 to 40 tools: BH40 - BH30 2L - BH29 - BH17 - BH9.



1 or 2 outlet horizontal milling units.

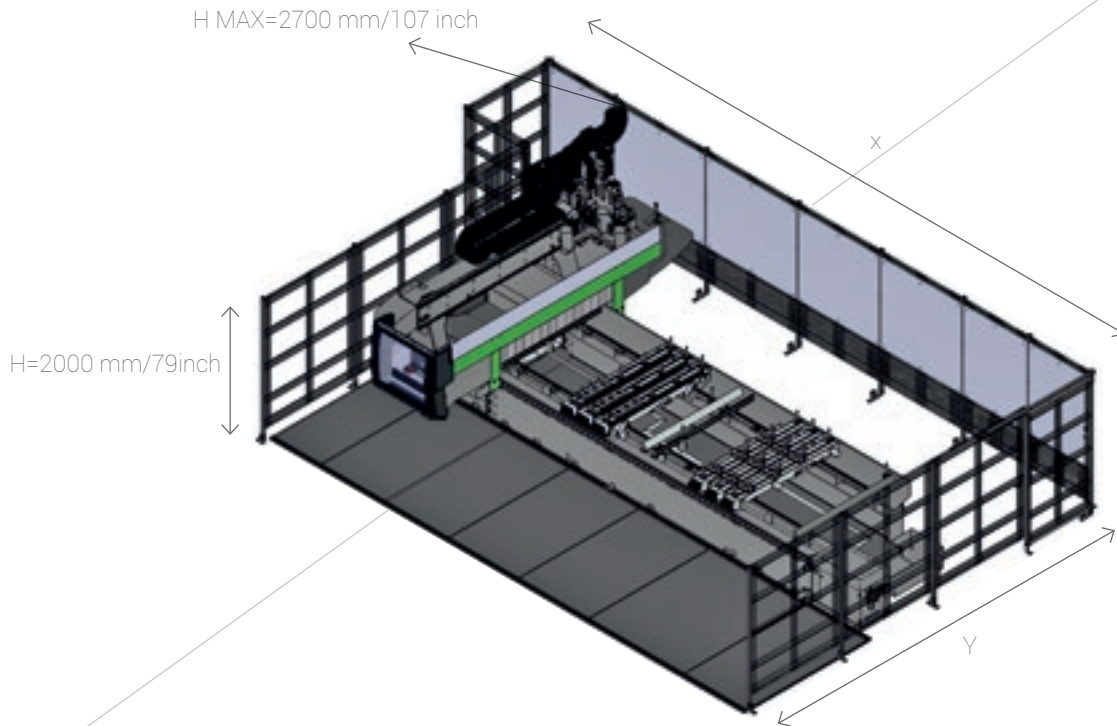


6 kW vertical milling unit.



Multi-function, with 360° rotation.

Technical specifications



Working table

	X	Y	Z
	mm/inch	mm/inch	mm/inch
Rover B 16.38	3855/151.7	1650/64.9	245/9.6
Rover B 16.50	5055/199	1650/64.9	245/9.6
Rover B 16.67	6735/265.1	1650/64.9	245/9.6
Rover B 19.38	3855/151.7	1930/75.9	245/9.6
Rover B 19.50	5055/199	1930/75.9	245/9.6
Rover B 19.67	6735/265.1	1930/75.9	245/9.6

X/Y/Z axis speed	80/85-120/20-35 m/min	262.4/278.8-393.7/65.6-114.8 foot/min
Vector speed	117-140 m/min	383.8-459,3 foot/min

Foot print

	X CE mats	Y CE mats	X CE photocells + bumper	Y CE photocells + bumper	H	H MAX
	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch
Rover B 16.38 conf. 1, 2, 3	7881/310.2	5657/222.7	8181/322	5647/222.3	2000/78.7	2500/98.4
Rover B 16.50 conf. 1, 2, 3	9094/358	5657/222.8	9364/368.6	5647/222.3	2000/78.7	2500/98.4
Rover B 16.67 conf. 1, 2, 3	10757/423.5	5657/222.9	11057/435.3	5647/222.3	2000/78.7	2500/98.4
Rover B 19.38 conf. 1, 2, 3	7881/310.2	5857/230.5	8181/322	5797/228.2	2000/78.7	2500/98.4
Rover B 19.50 conf. 1, 2, 3	9094/358	5857/230.5	9364/368.6	5797/228.2	2000/78.7	2500/98.4
Rover B 19.67 conf. 1, 2, 3	10757/423.5	5857/230.5	11057/435.3	5797/228.2	2000/78.7	2500/98.4
Rover B 16.38 conf. 4, 5	7941/312.6	6210/244.4	8241/324.4	6200/244	2000/78.7	2500/98.4
Rover B 16.50 conf. 4, 5	9154/360	6210/244.4	9424/371	6200/244	2000/78.7	2500/98.4
Rover B 16.67 conf. 4, 5	10817/425.8	6210/244.4	11117/437.6	6200/244	2000/78.7	2500/98.4
Rover B 19.38 conf. 4, 5	7941/312.6	6410/252.3	8241/324.4	6350/249.9	2000/78.7	2500/98.4
Rover B 19.50 conf. 4, 5	9154/360	6410/252.3	9424/371	6350/249.9	2000/78.7	2500/98.4
Rover B 19.67 conf. 4, 5	10817/425.8	6410/252.3	11117/437.6	6350/249.9	2000/78.7	2500/98.4

	X NCE mats	Y NCE mats	X NCE photocells + bumper	Y NCE photocells + bumper	H	H MAX
	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch
Rover B 16.38 conf. 1, 2, 3	7881/310.2	5457/214.8	8181/322	5497/216.4	2000/78.7	2500/98.4
Rover B 16.50 conf. 1, 2, 3	9094/358	5457/214.8	9364/368.6	5497/216.4	2000/78.7	2500/98.4
Rover B 16.67 conf. 1, 2, 3	10757/423.5	5457/214.8	11057/435.3	5497/216.4	2000/78.7	2500/98.4
Rover B 19.38 conf. 1, 2, 3	7881/310.2	5657/222.7	8181/322	5647/222.3	2000/78.7	2500/98.4
Rover B 19.50 conf. 1, 2, 3	9094/358	5657/222.8	9364/368.6	5647/222.3	2000/78.7	2500/98.4
Rover B 19.67 conf. 1, 2, 3	10757/423.5	5657/222.9	11057/435.3	5647/222.3	2000/78.7	2500/98.4
Rover B 16.38 conf. 4, 5	7941/312.6	6010/236.6	8241/324.4	6050/238.1	2000/78.7	2500/98.4
Rover B 16.50 conf. 4, 5	9154/360	6010/236.6	9424/371	6050/238.1	2000/78.7	2500/98.4
Rover B 16.67 conf. 4, 5	10817/425.8	6010/236.6	11117/437.6	6050/238.1	2000/78.7	2500/98.4
Rover B 19.38 conf. 4, 5	7941/312.6	6210/244.4	8241/324.4	6200/244	2000/78.7	2500/98.4
Rover B 19.50 conf. 4, 5	9154/360	6210/244.4	9424/371	6200/244	2000/78.7	2500/98.4
Rover B 19.67 conf. 4, 5	10817/425.8	6210/244.4	11117/437.6	6200/244	2000/78.7	2500/98.4

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.

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.

Made **With** Biesse

Biesse Group technologies join forces with Lago's innovation and total quality management processes.

In the crowded world of domestic design, Lago takes its place as an emerging brand, thanks to a collection of stimulating products and a corporate philosophy that embraces the interaction between business and art, coupled with on-going research into sustainable development.

"We created a number of projects, or rather, concepts - states Daniele Lago - that have shaped Lago as we see it today: we saw design as a cultural vision that applies not only to individual products, but rather to the entire business chain".

"Flexibility is the key word here at Lago" says Carlo Bertacco, Manufacturing

Manager. "We started to introduce the concept of processing only outstanding orders, which enabled us to reduce our footprint and empty the site from the very beginning".

"The machinery that we purchased - states Bertacco - is great, it entailed a limited investment versus the capabilities it offers and is linked to a specific manufacturing approach. What I am talking about is a given manufacturing volume with Lago-standard quality levels and the possibility of customising as late as possible, at the customer's request: in short, the very basic principles of lean manufacturing".

The flexibility offered by Lago has al-

lowed us to provide clients with a modular alphabet with which to build a personal space in keeping with his or her own personal needs. The "Lago Interior Life" company philosophy is focused on generate a sense of understanding and empathy between the interior and the people who live within it, combining environmental and personal well-being.

*Source: IDM Industria del Mobile
Lago, our customer since 1999, is one of most prestigious Italian furniture brands in the world.*



<http://www.lago.it>



Biesse Group

In

1 industrial group, 4 divisions and 8 production sites.

How

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

Where

30 branches and 300 agents/selected dealers.

With

customers in 120 countries, manufacturers of furniture, design items and door/window frames, producers of elements for the building, nautical and aerospace industries.

We

2,800 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 Stock Exchange (STAR segment) since June 2001.

 **BIESSEGROUP**

 **BIESSE**

 **INTERMAC**

 **DIAMUT**

MECHATRONICS

