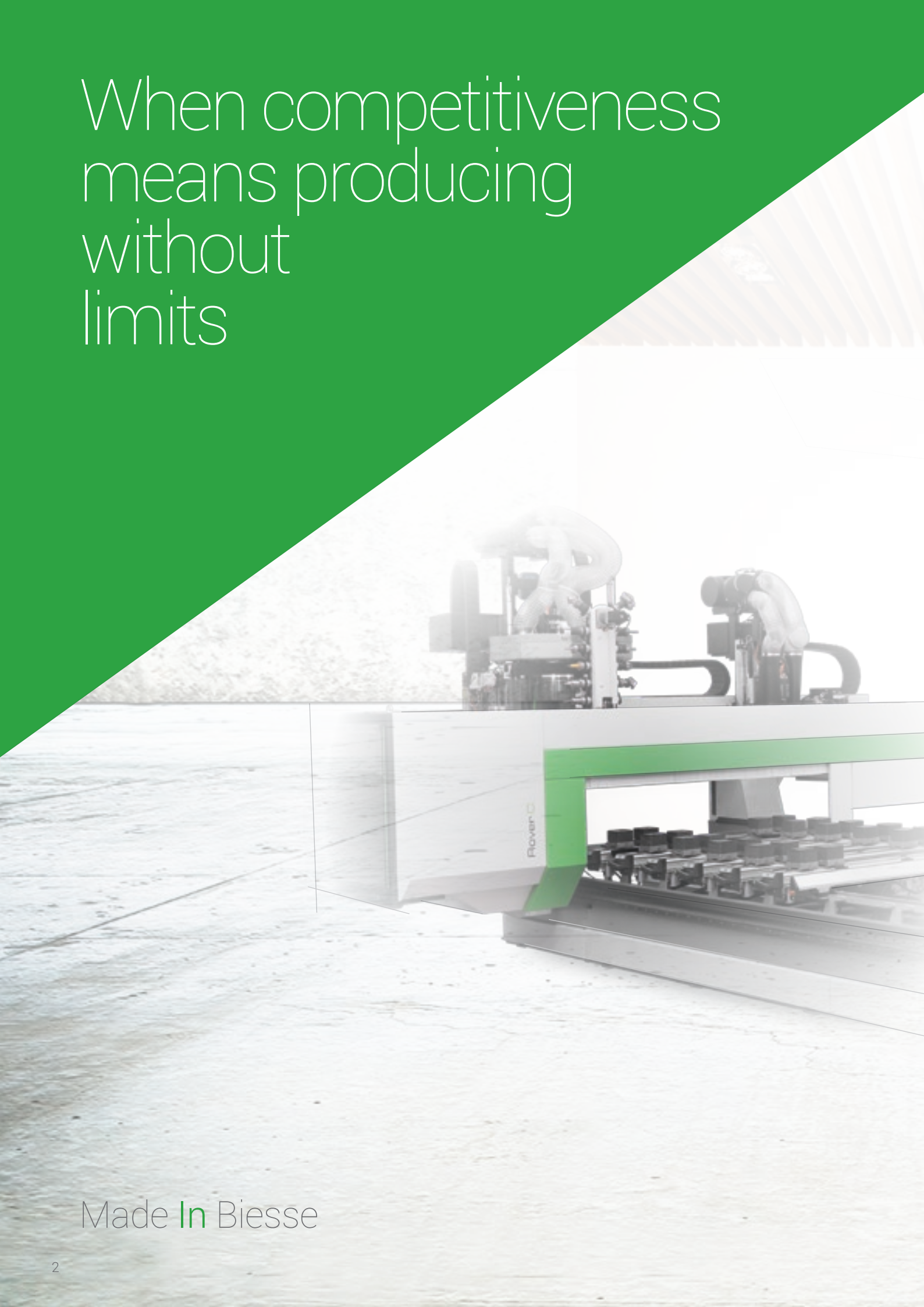
BIESSEROVER C

NC processing centre

When competitiveness means producing without limits



Made In Biesse

The market demands

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

Biesse meets these requirements

with technological solutions that highlight and support technical expertise as well as process and material knowledge. **Rover C** is the new processing centre for manufacturing furniture, staircase and door and window components of any shape, size and thickness with ease.
It was designed to be used for heavy-duty processing that requires large-size tools and aggregates.

- ☑ **Performance above the industry standard.**
- ☑ **More machining operation options.**
- ☑ **Perfect execution of machining operations.**
- ☑ **Cycle-time reduction for high productivity.**
- ☑ **High-tech becomes accessible and intuitive.**

Power meets precision

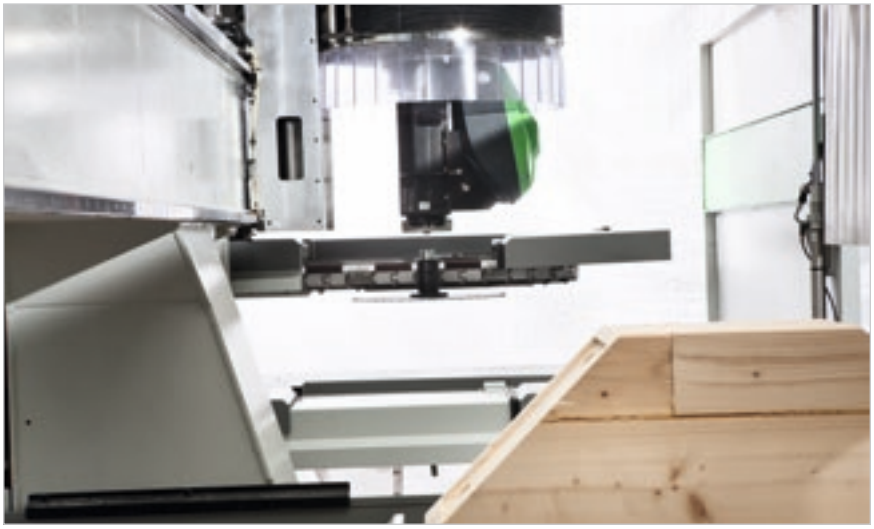
BIESSEROVER C

NC processing centre

Performance above the industry standard

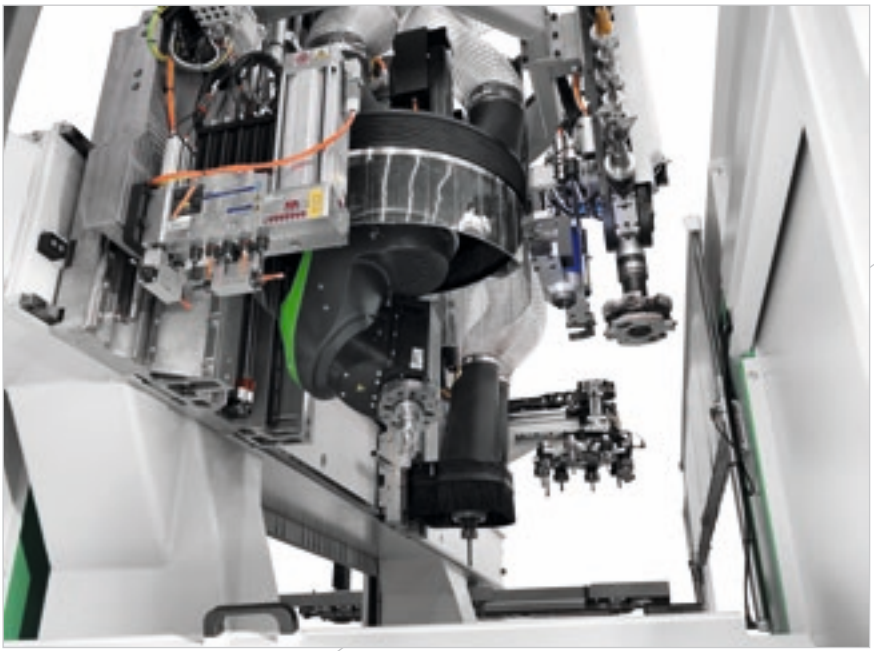
Unique technological solutions to meet productivity and flexibility requirements of the most demanding manufacturers.

Operating section with 5 21.5 kW and 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 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/sec² for high productivity.

Precise power

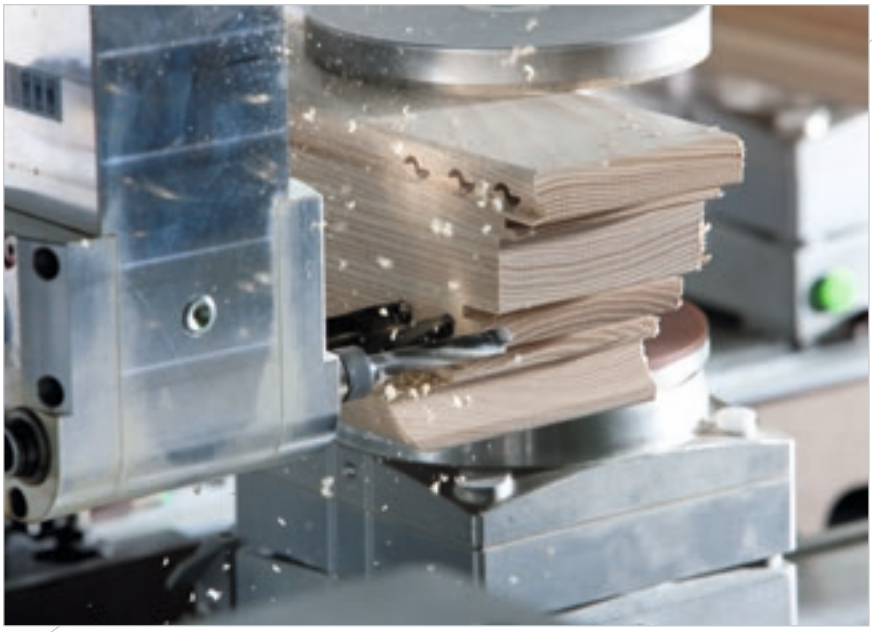
The new operating section with 5 interpolating axes supports complex processing operations whilst ensuring quality and precision. By combining 5 axes and 4 axes units it is possible to process any type of product. Independent Y axes, that enable users to carry out tool changes without affecting cycle times, and high axes speed and acceleration guarantee high productivity.

HIGH TECHNOLOGY

Unique technological solutions to meet productivity and flexibility requirements of the most demanding manufacturers. A perfect combination of innovation and Italian genius.

More machining operation options

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



Full processing of large panels

The rigid structure of the machine and the width of the Y axis allows users to machine panel widths 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 C 1636
Rover C 1648
Rover C 1665
Rover C 1682
Rover C 1936
Rover C 1948
Rover C 1965
Rover C 1982

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

Perfect execution of machining operations

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

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 quality finish and precision.

Practical design

The transparent polycarbonate reinforced protection door is designed to guarantee maximum visibility for the operator. Fitted with 5-colour LEDs indicating the machine status, it ensures that the 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

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 processing 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.

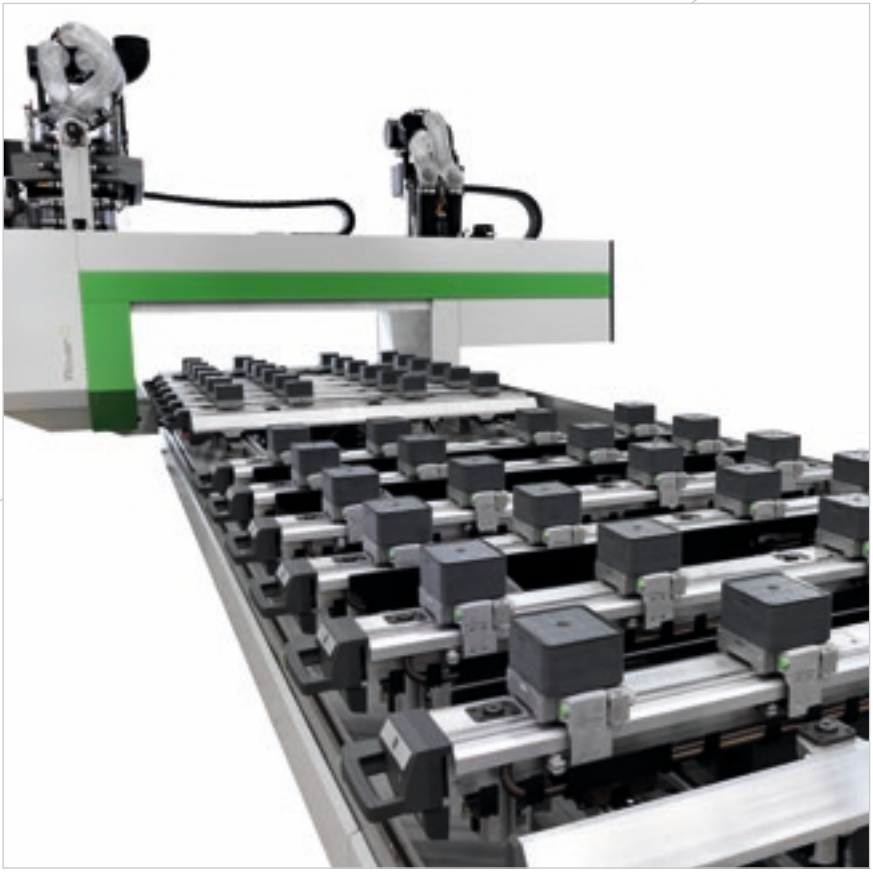
Independent Y axis allows tool changes whilst the machine is running, using the largest possible number of tools available in the magazine. The **shuttle** in the vertical chain magazine speeds up the tool change operation.

Facilitated access during tool change operations thanks to the openable front hood.

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

Reduced tool changeover time

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



Modules for vacuum locking system.

Pneumatic **Uniclamp** .

Hyperclamp for rigid and precise locking.

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.

Over 1,500 processing centres with EPS sold worldwide.

EPS (Electronic Positioning System)
supports the automatic rapid re-configuration of the entire work area and positions. Positions work tables and carriages by means of separate motors, i.e. without engaging the operating section. The positioning of the area's pods and rails is performed during machining, whilst the machine is working on the adjacent area.

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 view the process prior to manufacture and maximise material and process efficiencies.**
- ☑ **Virtual prototyping of the component to avoid collisions and ensure optimal machine efficiency.**

Watch the **bSolid** ad at: youtube.com/biessegroup

bSolid

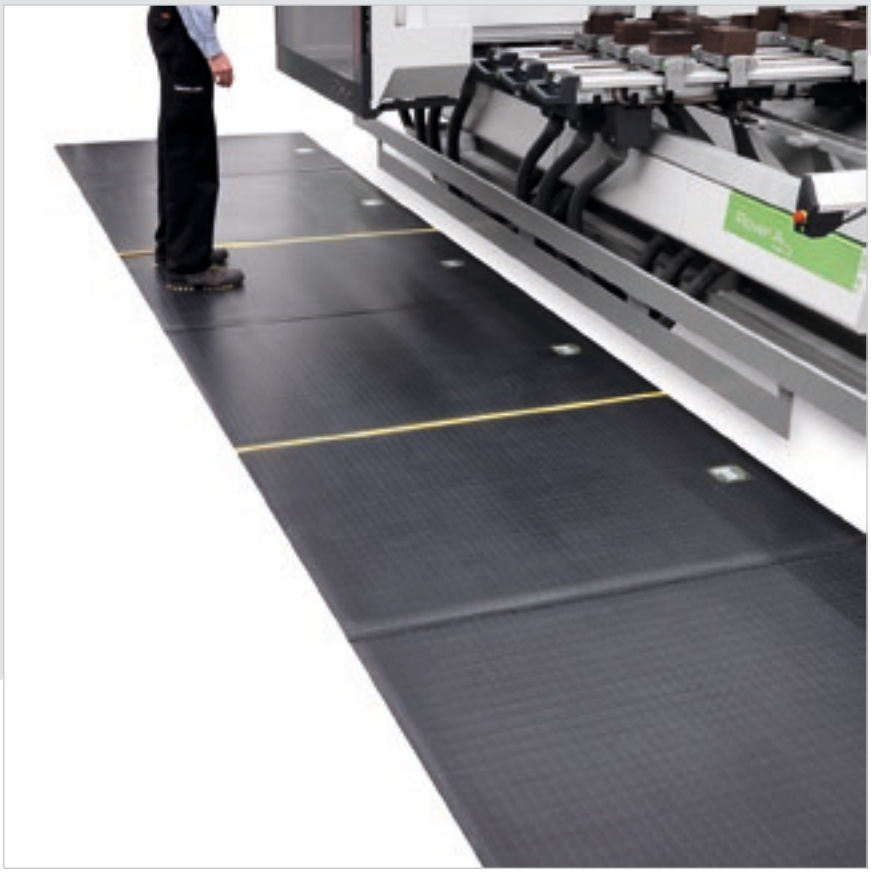
Maximum design freedom

bWindows is a seamlessly integrated plug-in for the planning of windows/door frames. By exploiting bSuite's planning functionality, bWindows provides unparalleled capabilities.

- ☑ **Creation of window/door frames even with extremely complex designs.**
- ☑ **Ability to visualise all components and composition of the products to be manufactured.**
- ☑ **Precise calculation of the timing of job lists generated by an entire order.**

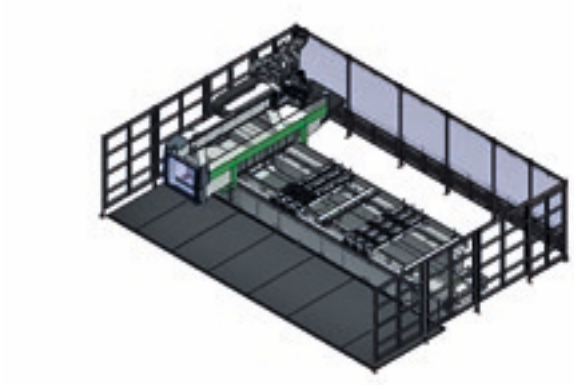
b**W**indows

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.



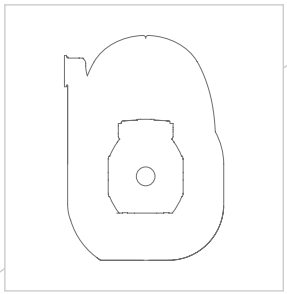
Perimeter guards with front access door.

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

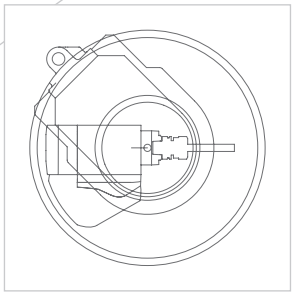
Remote control panel for direct and immediate operator control.

Maximum visibility of machining operation.
LED bar with 5 colours showing machine status in real time.

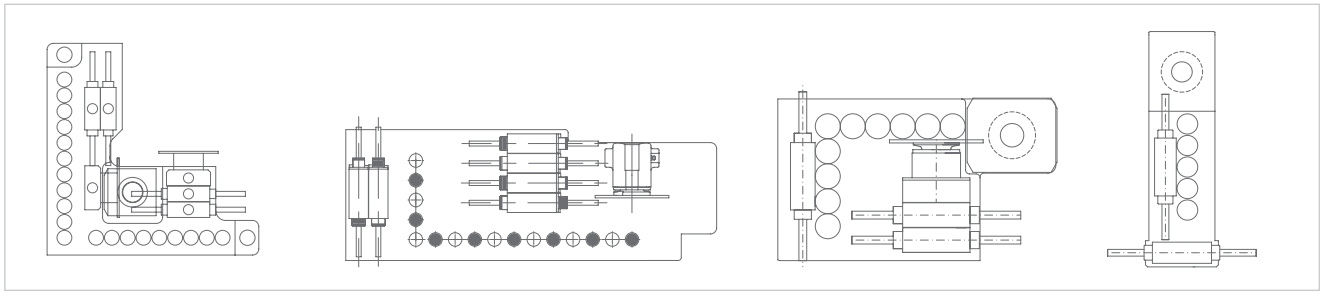
Customisable configurations depending on different production needs



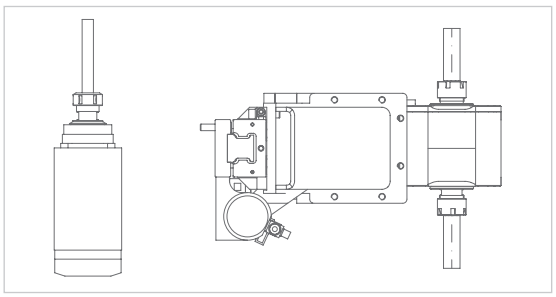
Milling head with air or liquid cooling and power up to 19.2 kW.



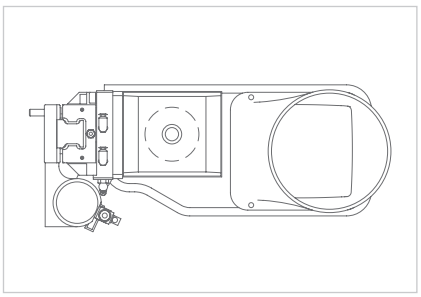
5-axis milling unit with 13 - 16.5 - 21.5 kW power.



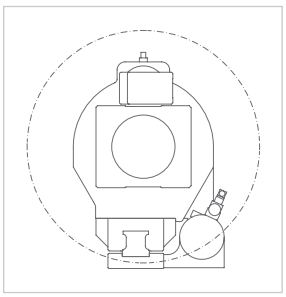
Boring heads from 9 to 30 tools: BH30 2L - BH29 - BH17 - BH9.



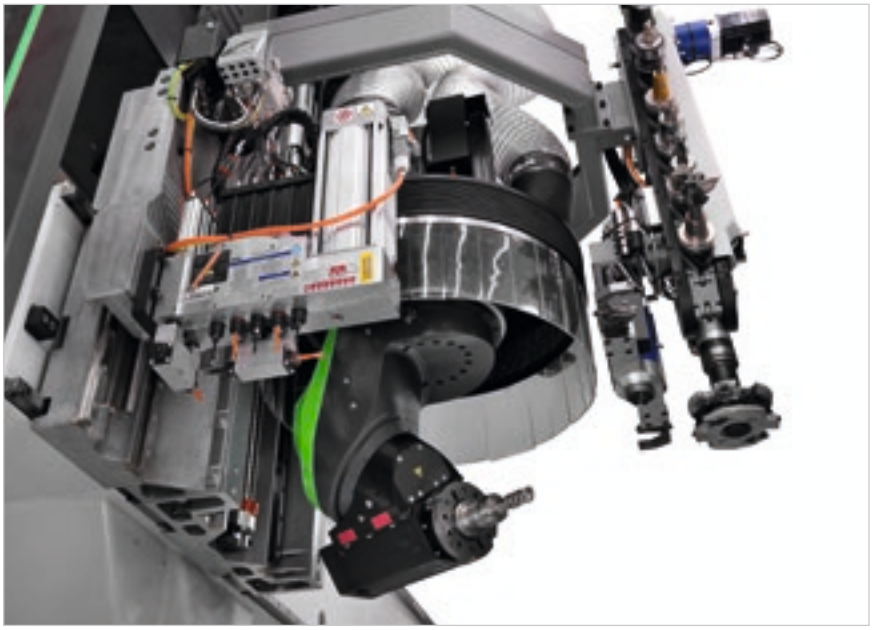
1 or 2 outlet horizontal milling units.



6 kW vertical milling unit.



Multi-function, with 360° rotation.



Exceptional finish quality

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.

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.

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

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

A complete range of aggregates

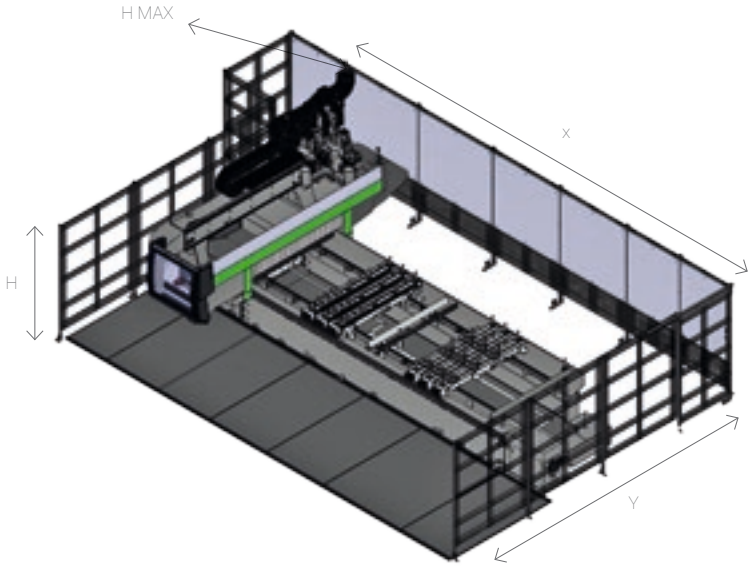
Optimal cleaning of machined components and work area

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**.

Technical specifications



Working fields

	X	Y	Z
ROVER C 1636	3625	1650	400
ROVER C 1648	4825	1650	400
ROVER C 1665	6505	1650	400
ROVER C 1682	8125	1650	400
ROVER C 1936	3625	1950	400
ROVER C 1948	4825	1950	400
ROVER C 1965	6505	1950	400
ROVER C 1982	8125	1950	400

Working dimensions

	X CE mats	Y CE mats	X CE Bumper	Y CE Bumper	H	H MAX	
						5 axes	4 axes
ROVER C 1636	8121	6547	8361	6530	2000	3370	3040
ROVER C 1648	9334	6547	9574	6530	2000	3370	3040
ROVER C 1665	11027	6547	11267	6530	2000	3370	3040
ROVER C 1682	12720	6547	12930	6530	2000	3370	3040
ROVER C 1936	8121	6567	8361	6530	2000	3370	3040
ROVER C 1948	9334	6567	9574	6530	2000	3370	3040
ROVER C 1965	11027	6567	11267	6530	2000	3370	3040
ROVER C 1982	12720	6567	12930	6530	2000	3370	3040

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

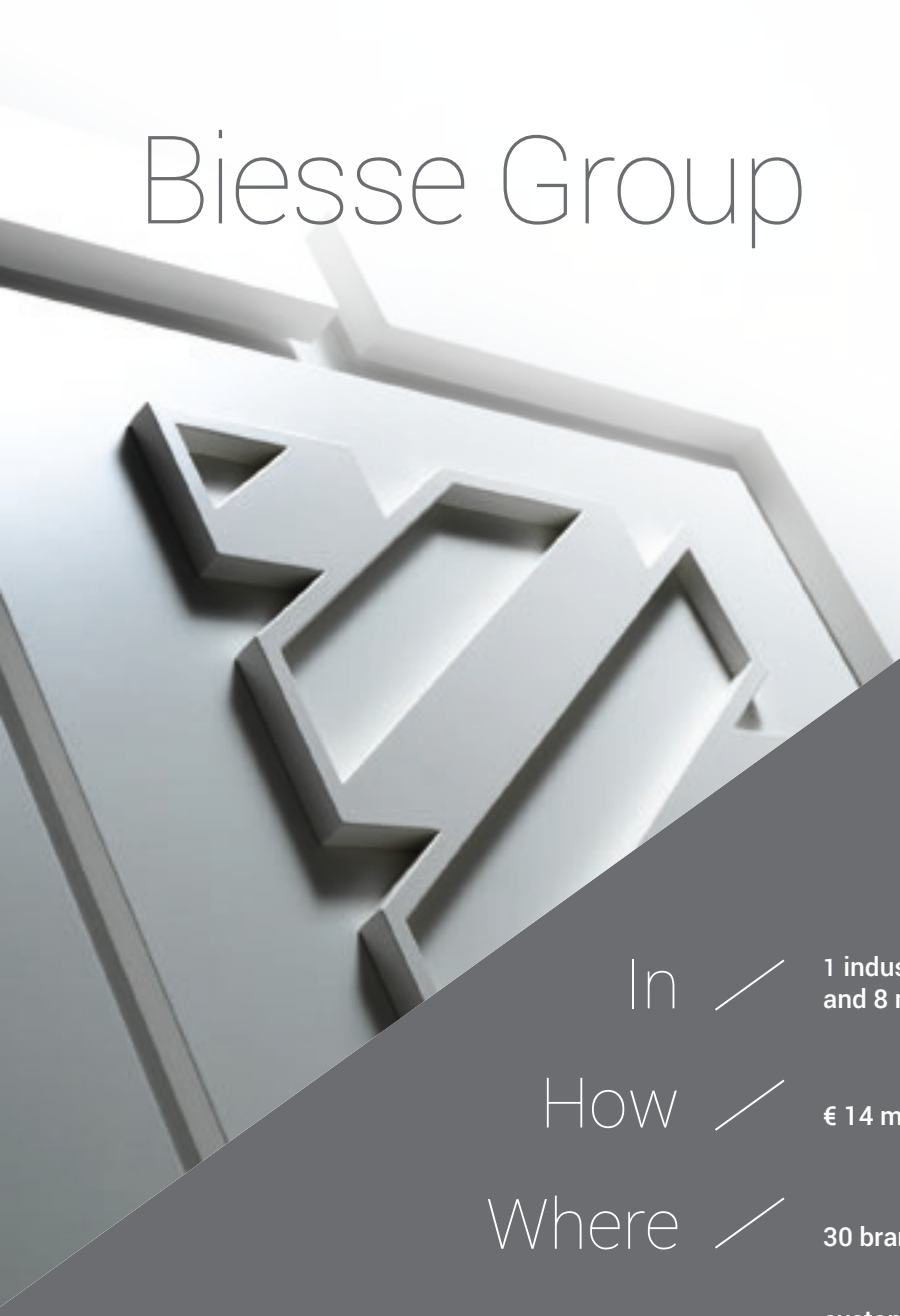
Biesse Group technologies join forces with Lago's innovation and total quality management processes.

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".
Lago's flexibility offers customers modular elements with which they can build a personal space that reflects their individual character. The "Lago Interior Life" corporate philosophy, as a matter of fact, is aimed at creating empathy between interiors and the people who live in them, between environmental and inner 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 manufacturing sites.**

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

Where / **30 branches and 300 agents/certified 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 worldwide.**

Biesse Group is a global 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

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