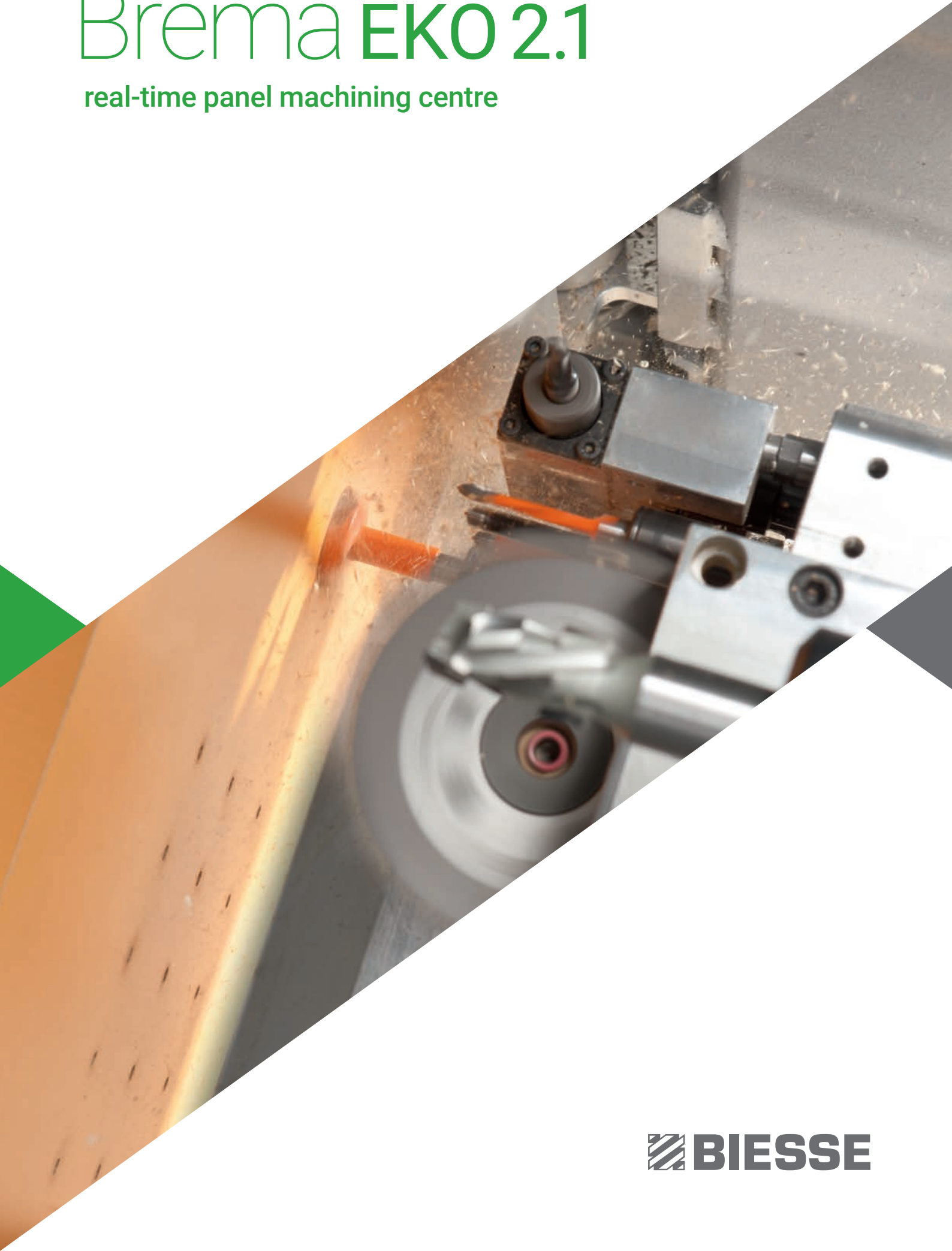


# Brema EKO 2.1

real-time panel machining centre



 **BIESSE**

# When competitiveness means reducing production times

Brema EKO 2.1

Made In Biesse

## The market requires

a change in production processes to meet the ever growing request for **customised products** to satisfy customers' specific needs coupled with **quick and definitive delivery time scales**. Production volumes are no longer a certainty and manufacturing using statistical analysis is not a valid option. Production diversification is key to success.

## Biesse responds

with **technological solutions** able to meet the requirements of companies that manufacture to order, with notably reduced costs and cycle times. **Brema Eko 2.1** is the new compact and versatile vertical boring machine that supports the machining of different thickness and size formats within a reduced footprint. It is the ideal solution for "just in time" manufacturing for artisans, small companies and special components within large companies.

- ▶ **Maximum manufacturing efficiency thanks to the elimination of set-up times.**
- ▶ **Optimal product quality.**
- ▶ **Machine customisation depending on production requirements.**



Minimum footprint,  
maximum performance



**Brema EKO 2.1**  
real-time panel machining centre



# Maximum manufacturing efficiency thanks to the elimination of set-up times



The **vertical positioning of the** panel and the work table with rubber rollers ensure ergonomically optimal loading/unloading which supports the machining of even the most delicate surfaces.



The work table is fitted with a **counter-pressure system** that keeps the panel perfectly in position within the machine depending on the thickness of the machined piece, ensuring maximum precision.



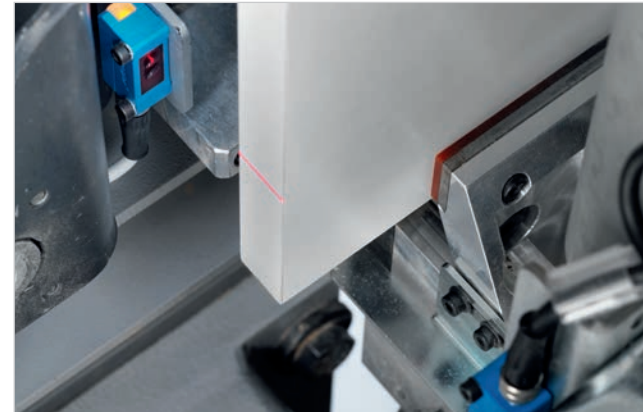
In addition, the clamps, are fitted with a **panel thickness detection system** that enables the machine to modify the programme's values in real time, guaranteeing the precision of "Z"-axis machining operations.



## Brema EKO 2.1



The **laser scanner** system that detects the start and the end of the panel enables the machine to compensate dimensional errors, correcting the panel's X dimensions.



The **upper sensor** systems consists of two photocells that can detect the panel's height and correct the size with respect to the "Y" axis.



**8-position tool magazine** that manages different types of aggregates, thus increasing the machine's versatility.





# Compact power

Brema vertical boring machines can carry out all boring, milling and glue and dowel insertion operations, as well as boasting the ability to manage additional hardware inserts. The structure of these machines has been designed to achieve optimal loading and unloading ergonomics, with a small footprint which saves 50% of space, in addition to offering zero set-up times and high levels of productivity.

## VERTICAL DRILLING

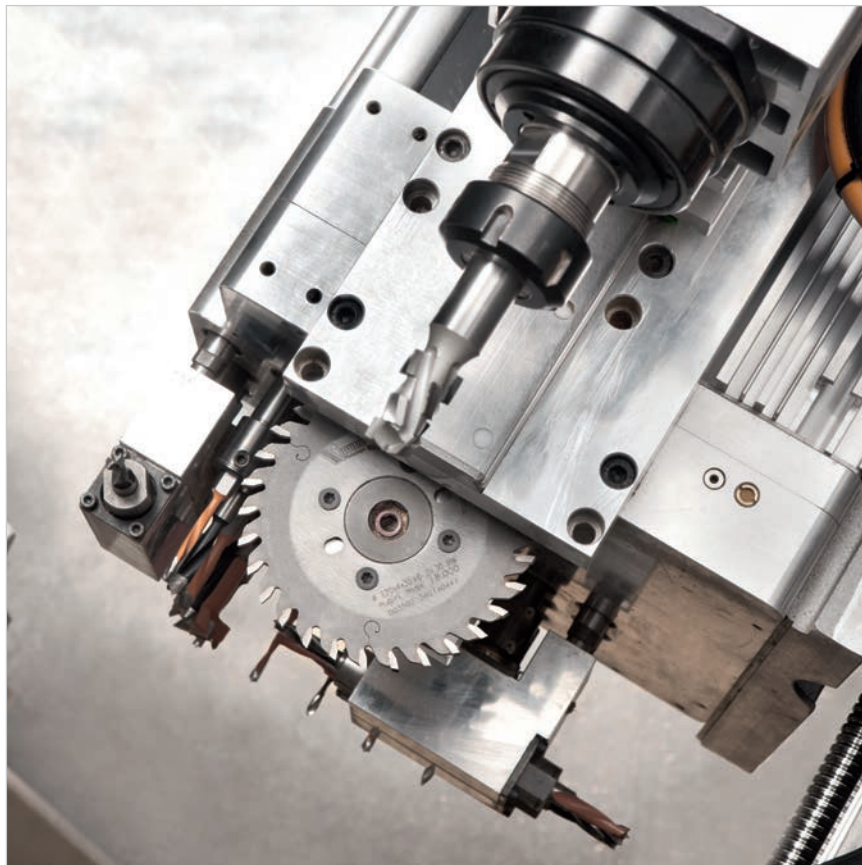
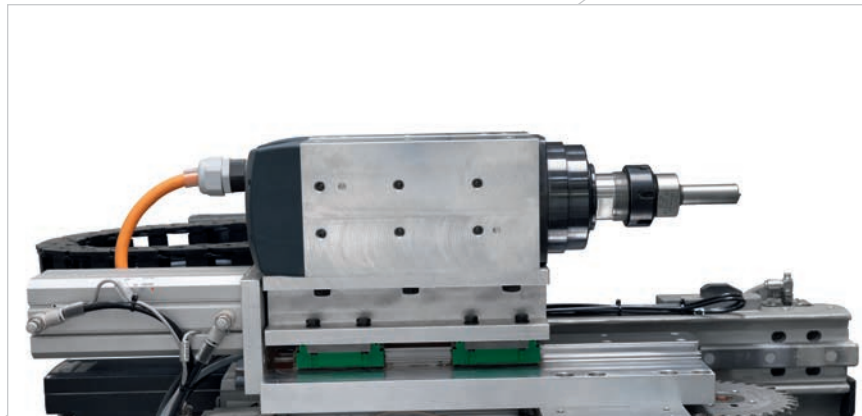
The vertical position of the panel and the technical characteristics of these vertical boring machines allow for the processing of more delicate surfaces. A perfect combination of Biesse technology and Italian genius.



# Optimal product quality

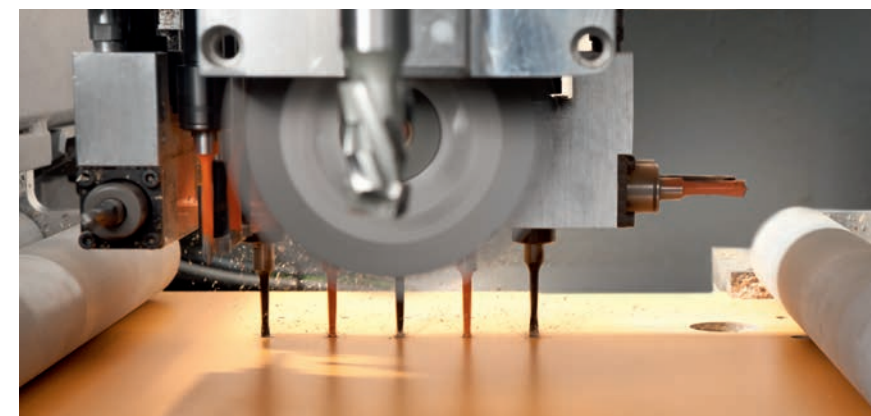
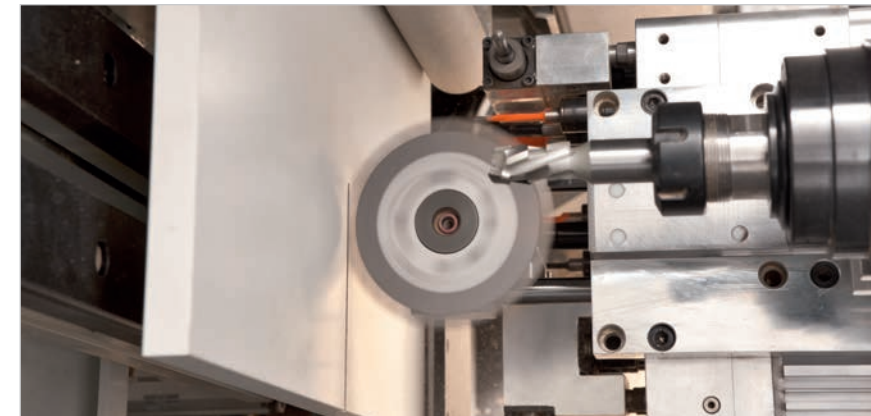
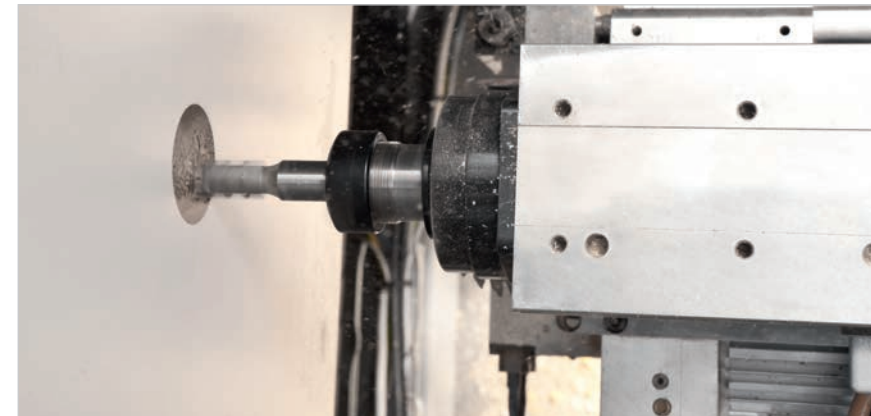
**Biesse uses the same high-tech components for all machines in its product range.**

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



Brema **EKO 2.1**

The machine's structure and components guarantee the highest level of precision for any type of machining operation.



# High-tech becomes accessible and intuitive

bSolid



**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)

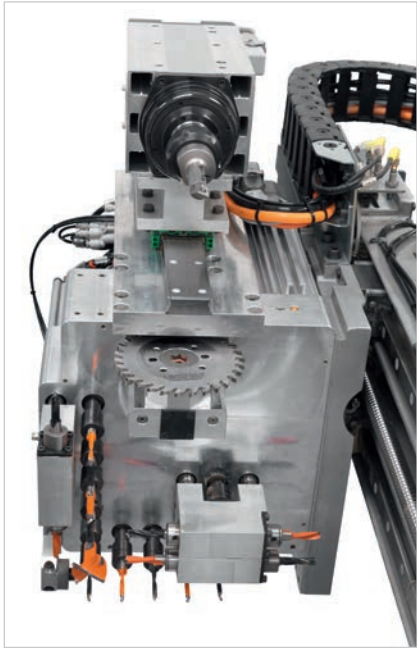
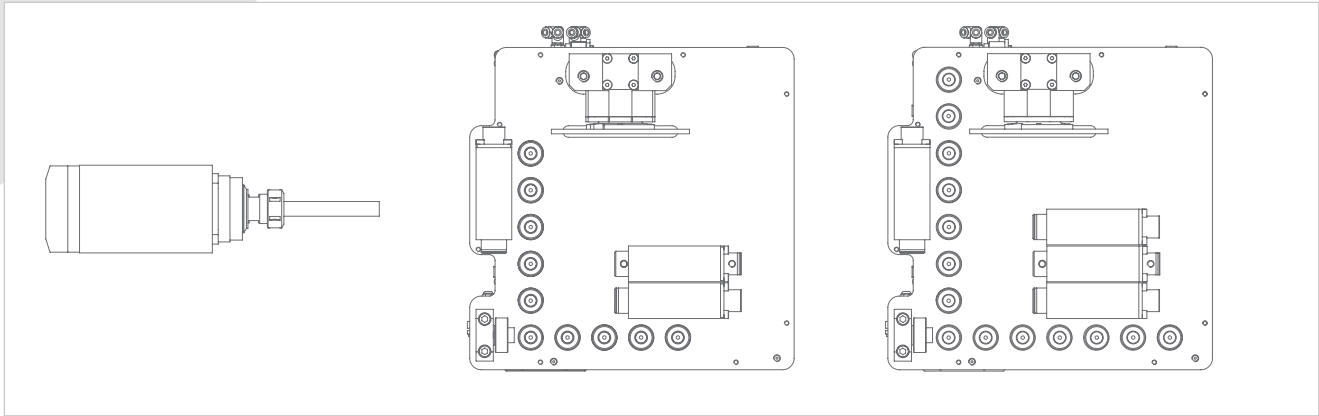




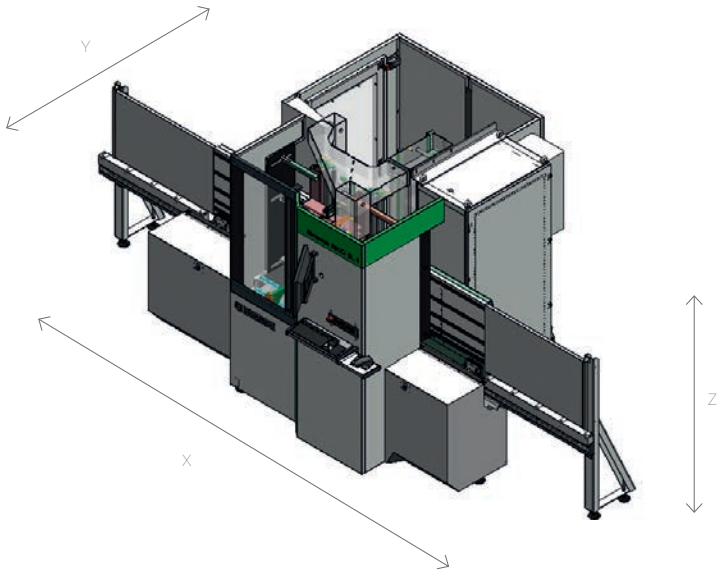
# Machine customisation depending on production requirements



Milling units from 4.5 to 5.5 kW and boring units with 17 or 23 tools are available.



# Technical specifications



Machine size	2,800x1,940x2,000 mm
Min. size of machined panel	200x35x8 mm
Max. size of machined panel	2,600 (3,200)x900x60 mm
Vector speed	(x-y) = 65, z=20 m/min

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.

Weighted sound pressure level A (LpA) dB(A) 75  
Weighted sound pressure level A (LwA) dB(A) 90  
Measurement uncertainty K 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.

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 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.

## 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 mod-

ular 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 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 elements 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**



