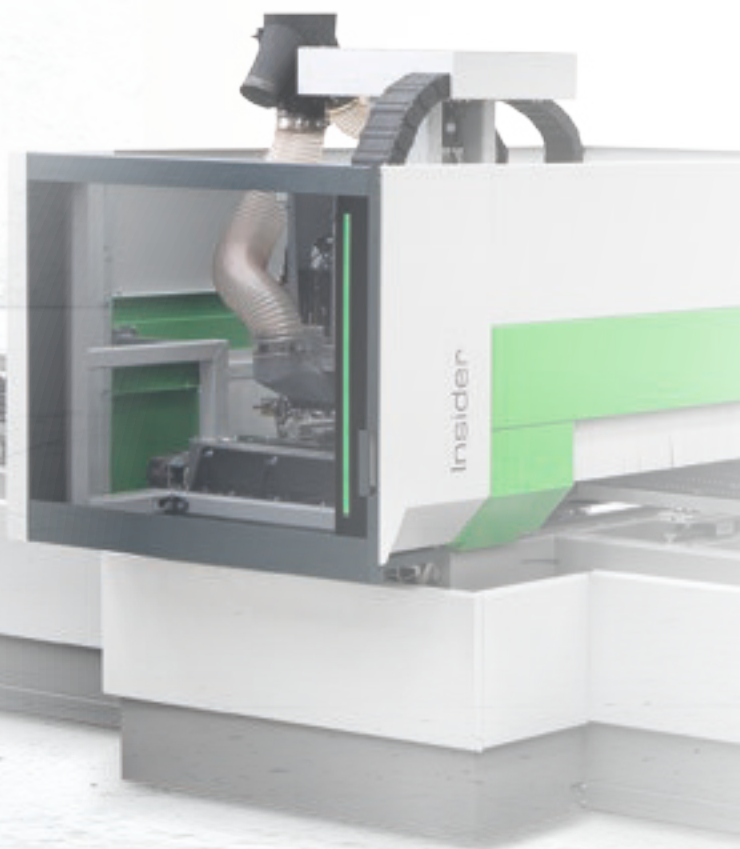


# **BIESSE INSIDER DOOR**

Boring machine / Boring-inserting machine



When competitiveness  
means being able  
to satisfy many  
requirements



Made **In** Biesse

## The market demands

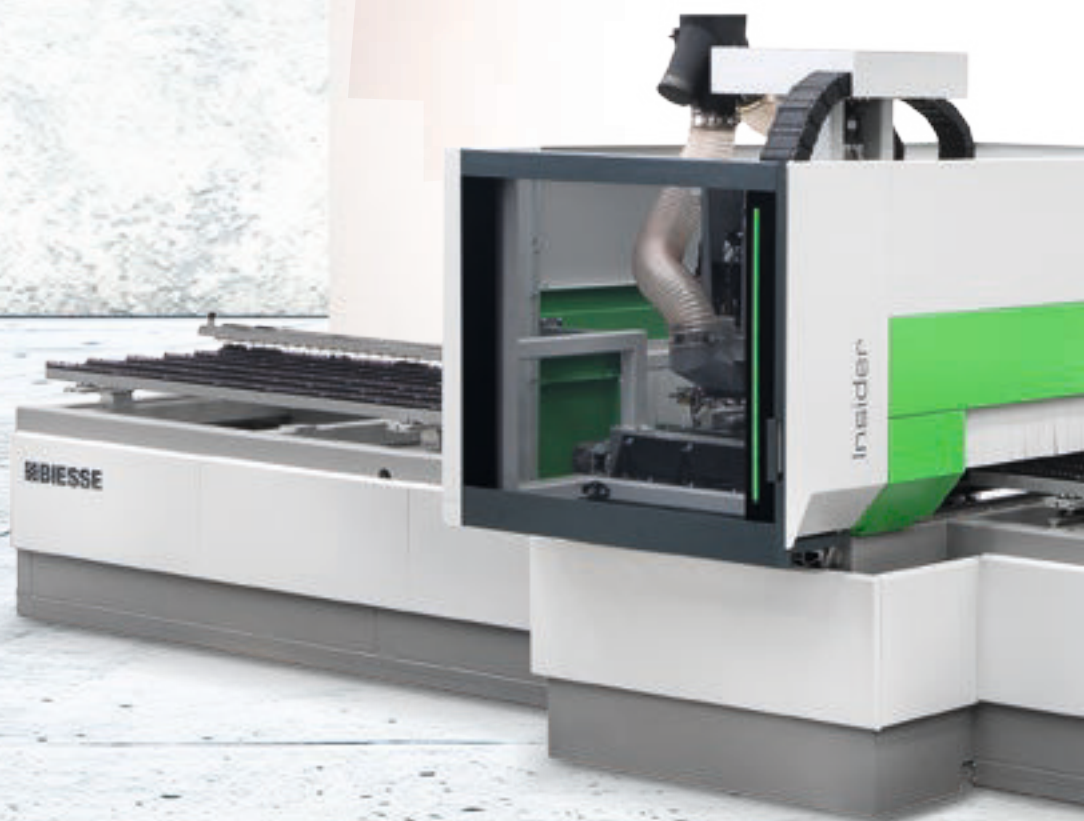
a change in manufacturing processes, enabling companies to accept the **largest possible number of orders**. This is coupled with the need to maintain high quality standards whilst offering product customisation with **quick and defined delivery times**, as well as responding to the needs of the most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

## Biesse responds

with **technological solutions** that underline and support technical expertise, as well as process and material knowledge. **Insider Door** is a family of machines designed to carry out boring (Insider Door FB) or boring-insertion (Insider Door KB) operations in a flexible way on doors, fronts and frames. Insider Door is designed to guarantee maximum flexibility, to best respond to contract manufacturing requirements.

- ✓ **Top quality for any type of machining operation.**
- ✓ **Machine customisation according to production requirements.**
- ✓ **Ground-breaking technology, for top performance.**
- ✓ **Full plant integration.**
- ✓ **User-friendliness.**

Low investment, high performance



## **INSIDER DOOR**

Boring machine / Boring-inserting machine



# Top quality for any type of machining operation

**Insider Door supports the automation of boring and boring-insertion operations, guaranteeing an optimal finish quality for machining operations coupled with the precision of a numerical control machine.**



Boring from below with hinge chuck.



Boring from above and/or below for handles, knobs, bumpers, etc.



Insertion of hinges and bumpers.



Horizontal boring for anuba hinges.

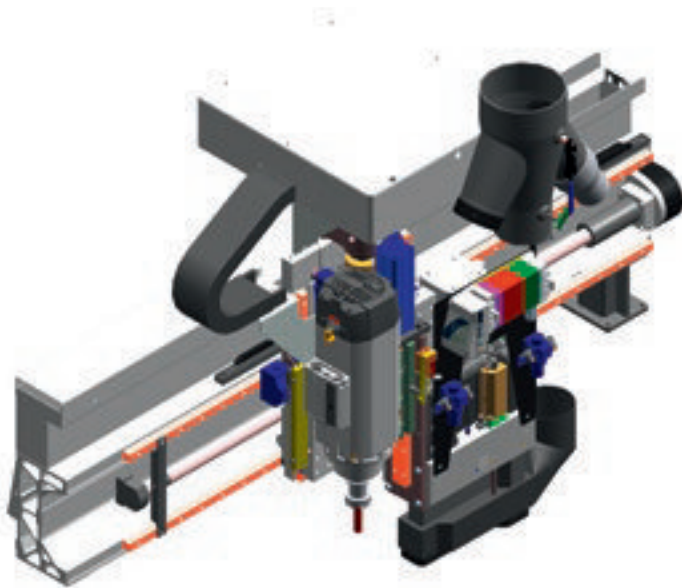


# Machine customisation according to production requirements

Up to 20 spindles available in the machine.



Lower boring head with 7 spindles on the Y axis and 3 on the X axis.



Upper beam unit complete with boring head with 7 spindles on the Y axis and 3 on the X axis, and a milling unit of 5.5 kW



# Ground-breaking technology, for top performance

**The technical solutions adopted by Insider Door allow optimal machining performance without the risk of damaging the panel, even when handling delicate materials.**



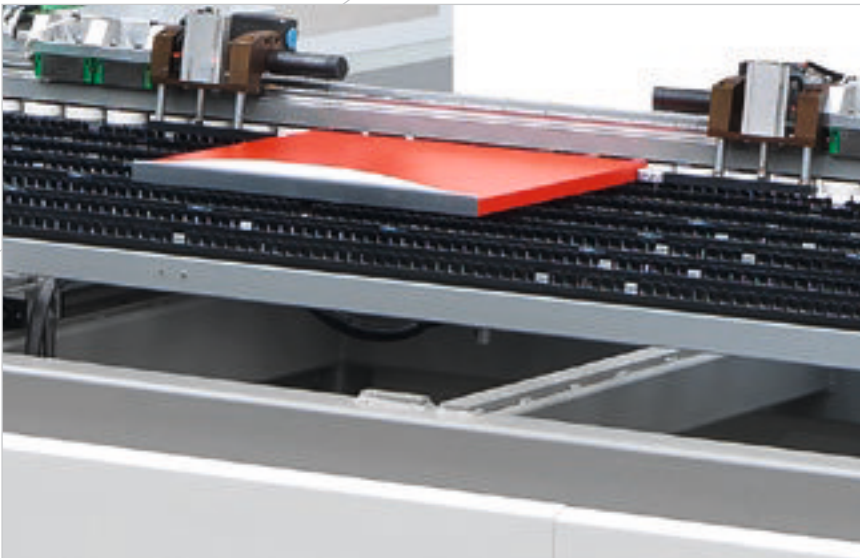
Insertion operations are precise, reliable and constant thanks to the press-fit pick-up system that operates on a fixed beam. Up to 3 different types of hinge can be inserted.



The insertion unit is powered by a vibrating feeder (maximum 2) and a vertical gravity feeder to provide the machine with the greatest possible autonomy and minimise the need for operator intervention.

# Full plant integration

**Biesse offers integrated cells and systems which are capable of maximising customer competitiveness by combining mass production techniques with a high degree of customisation to meet customers' exacting requirements.**



The panel handling system with controlled clamps has been specifically designed to prevent any positioning errors and to better handle the machining of delicate panels.



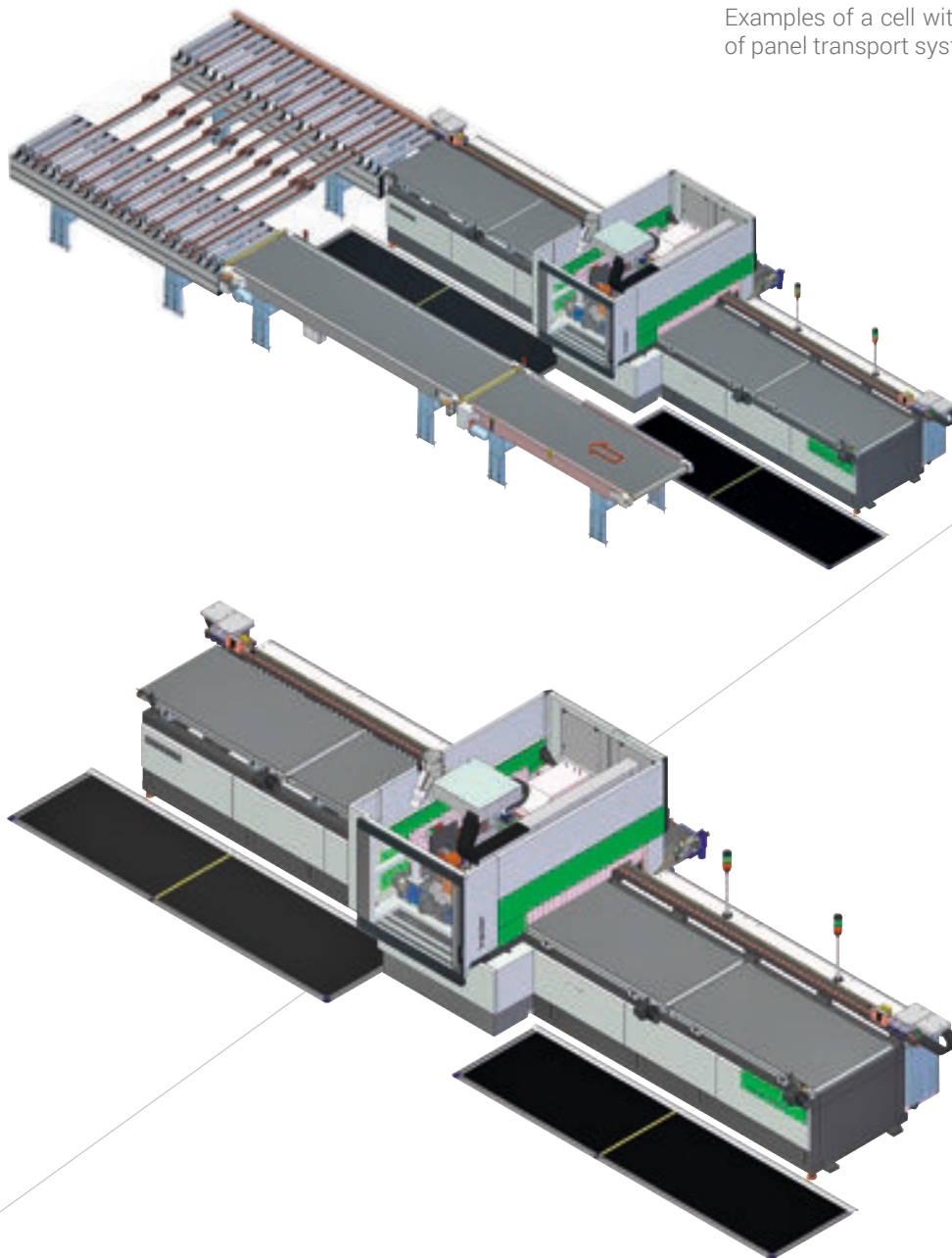
The pressers secure the panel during machining without scratching it and without compromising machine productivity.

Insider Door can be used as a stand-alone machine or within a cell with automatic panel handling, to increase productivity.

In both cases, the machine is managed by a single operator.



Examples of a cell with different types of panel transport systems



# Competitive personalisation

Biesse Systems is a team of highly trained engineers for large scale production processes. It offers integrated cells and systems capable of maximising customers' competitiveness by combining mass production requirements with the high degree of product personalisation requested by the end customers.



## PRODUCTION LINES

Made-to-measure turnkey factories, plus the integration of Biesse Group solutions with complementary software and machinery with over 300 systems installed worldwide. The perfect combination of Biesse Group experience and Italian genius.

# User-friendliness



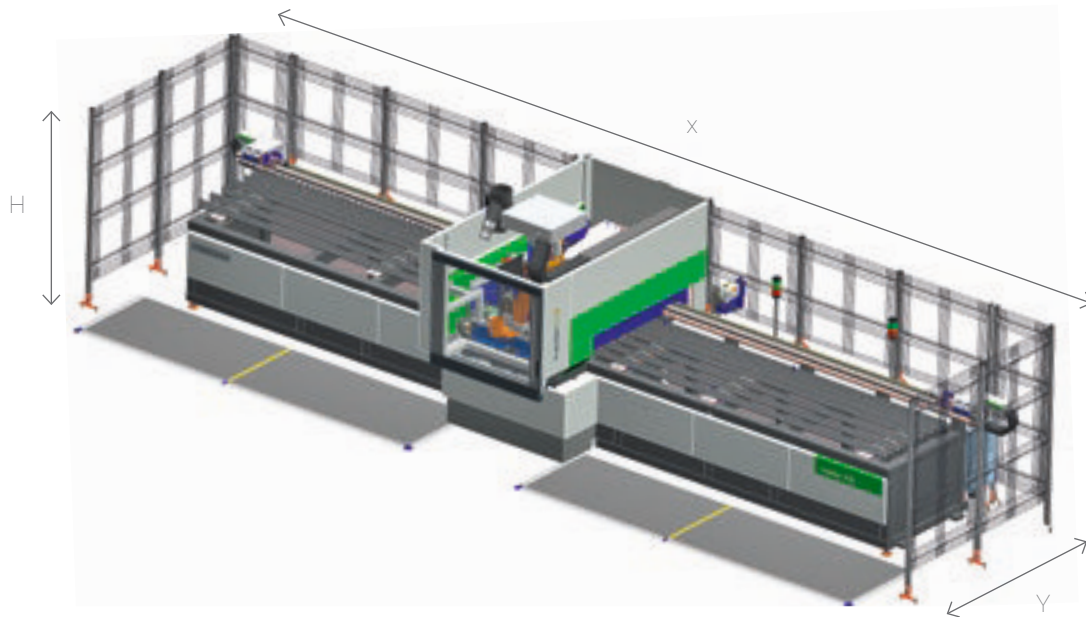
The user interface PC with Windows operating system is perfectly integrated with management software packages and network systems available on the market.

Many functions such as assisted graphic editor, parametric programming, machining head graphic tooling, the import of files in DXF and CID format - and many others - enable the machine to be used in an easy, intuitive way.

The ergonomic design of the machine focuses on the operator, guaranteeing the highest level of safety.



# Technical specifications



## Working dimensions

	Insider KB	Insider FB
	mm	mm
X	7875	7875
Y	3900	3180
Z	2000	2000
Work table height	900	900

Spindle rotation speed	6000 rpm
X/Y/Z axis speed	135/100/25m/min
Electrospindle rotation speed	24000 rpm

Actual working field (min-max)	
length	250-2500mm
width	97-800 (240-800 with hinges inserted)
height	13-30mm

The technical specifications and drawings are non-binding. Some photos may show machines equipped with optional features. Biesse Spa reserves the right to make 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'm 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 basic principles of lean manufacturing".

Lago's flexibility has allowed us to sup-

ply a modular alphabet for building a personal space in keeping with their style. The company philosophy - "Lago Interior Life" - aims, in fact, to create empathy between the interiors and the people who live there, between environmental well-being and interior 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**

