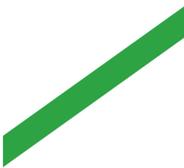


# **BIESSE ROVER BFT**

NC processing centre



# When competitiveness means reducing waste



Made **In** Biesse

## The market demands

a change in manufacturing processes which enables 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.

## Biesse reacts

with high-tech, innovative solutions for nesting operations. **Rover B FT** is the new NC processing centre with gantry structure and FT work table not only for the nesting of panels, small doors, furniture components and frames for sofas but also plexiglass, plastic, alucobond, aluminium and acrylics.

- ✓ **Can be fully integrated into a working cell.**
- ✓ **Increase of manufacturing capacity.**
- ✓ **Flexibility to handle both large and small panels of varying thickness.**
- ✓ **Optimised cleaning of machined component and work area.**
- ✓ **High-tech becomes accessible and intuitive.**

Higher productivity  
with reduced  
timescales is one  
word and costs



**ROVER BFT**  
NC processing centre



# Machine customisation provides the flexibility to cope with all manufacturing needs

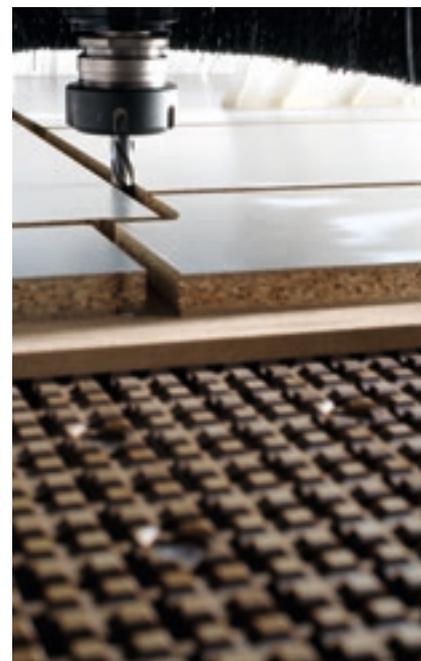
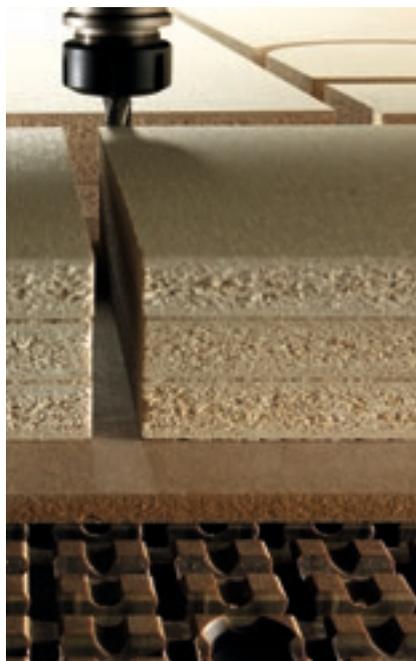
**The large number of sizes available enables operators to process all standard panel dimensions required for nesting.**

Available sizes:

Rover B FT1224  
Rover B FT1536  
Rover B FT1564  
Rover B FT1836  
Rover B FT2231  
Rover B FT2243  
Rover B FT2264



The modularity of the design allows Biesse to deliver machines with configurations which are customised to meet the requirements of individual customers.



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



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



The customer can choose from a vast range of electro-spindles, boring heads and aggregates designed and produced by HSD, the leader in this sector.



The new additional **OddBits boring head**, combined with a BH20, is a second boring head with independently removable spindles and a dedicated motor. The head is particularly useful for nest-based machining operations where panels are positioned in the nest with a 90° step rotation.

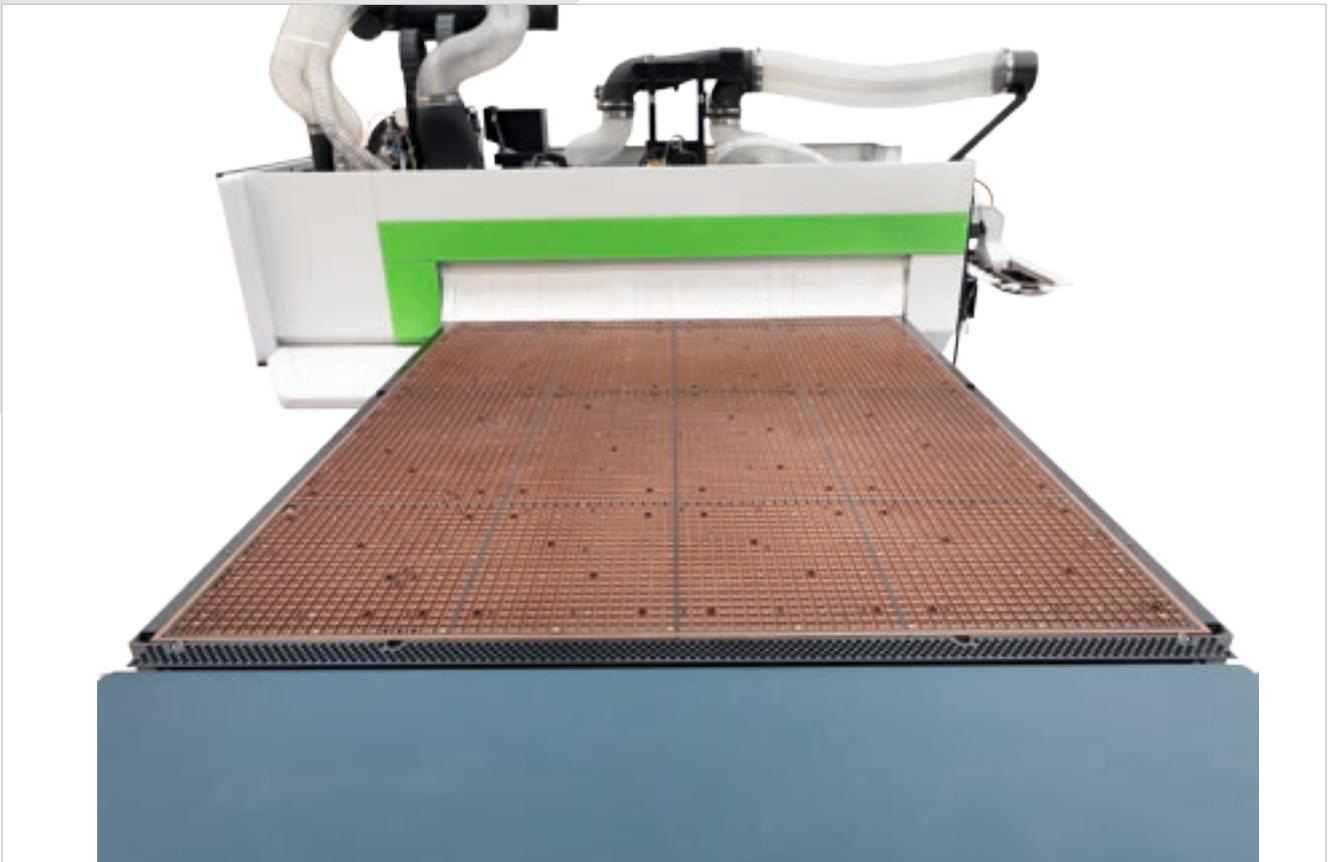


Reduction of tool change set-up time and the possibility of operator error, thanks to the **contact pre-setter**, which automatically determines the length of the tool.



8 to 29 tools and aggregates available in the tool changer, which are loaded automatically when switching from one machining operation to the next.

# High precision and reliability over time



Rover B FT has a **robust and well-balanced structure**, designed to handle demanding machining requirements without compromising product quality.



**Higher motors power** increases the accelerations up to 0.5 g and speed up to 120 m / min.



**Automated lubrication** is an option that ensures the continuous lubrication of the machine's main moving parts without the need for operator intervention.



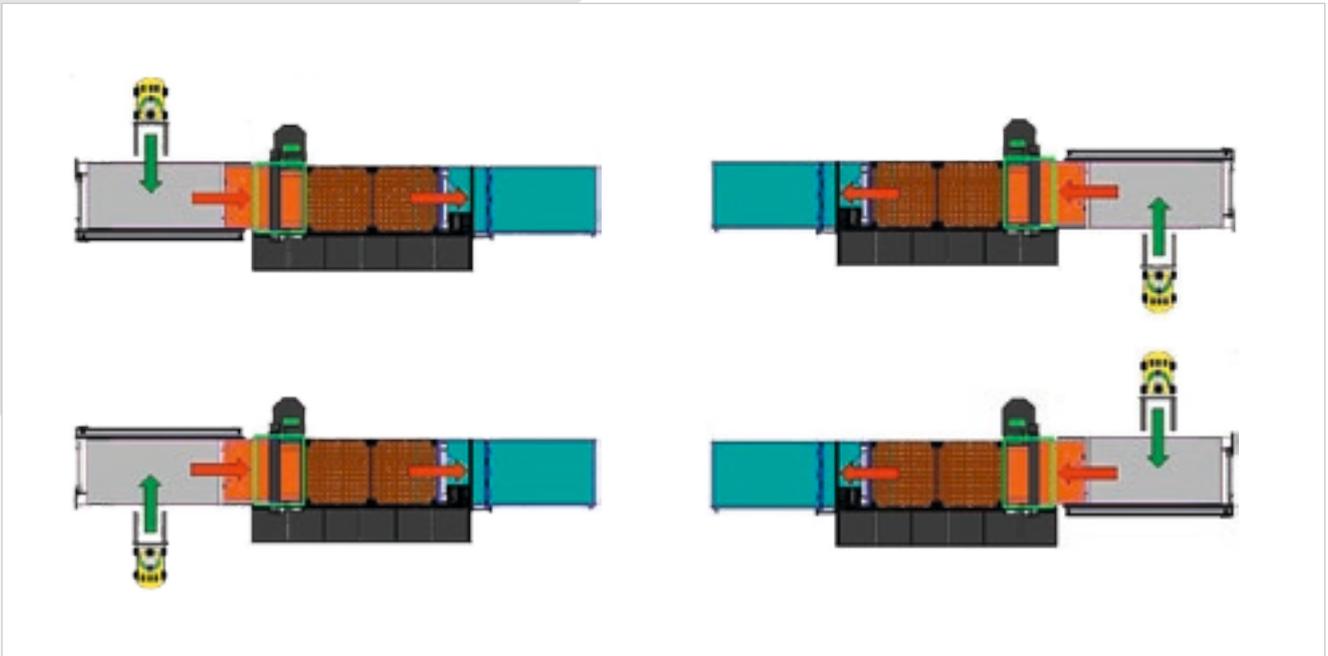
Large-size **THK linear guides** guarantee absolute precision and long term reliability.

# Can be fully integrated into a working cell

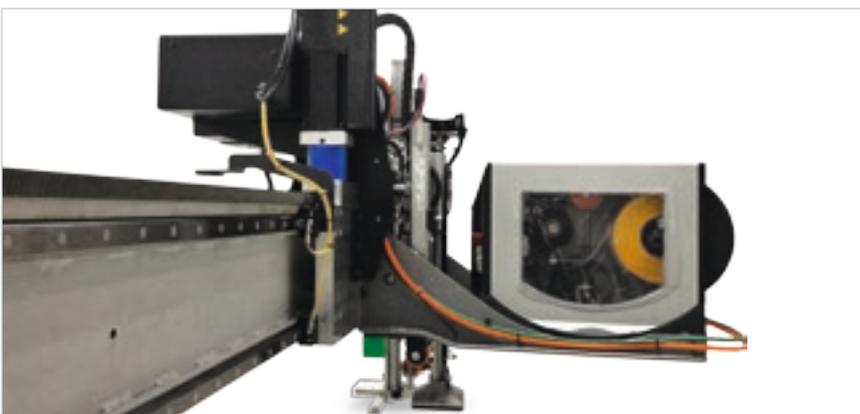
Rover B FT can be customised into a working cell to meet customer requirements.



Loading/unloading operations are carried out simultaneously, allowing the operator to remove completed components from the unloading station in the utmost safety whilst the machine is already processing the next panel.



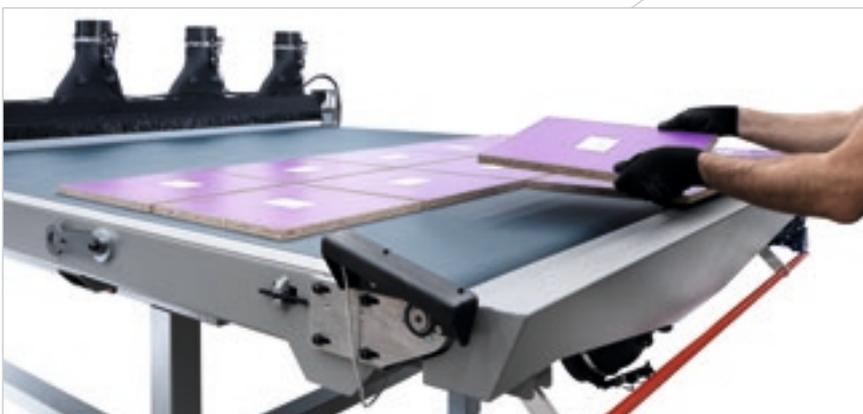
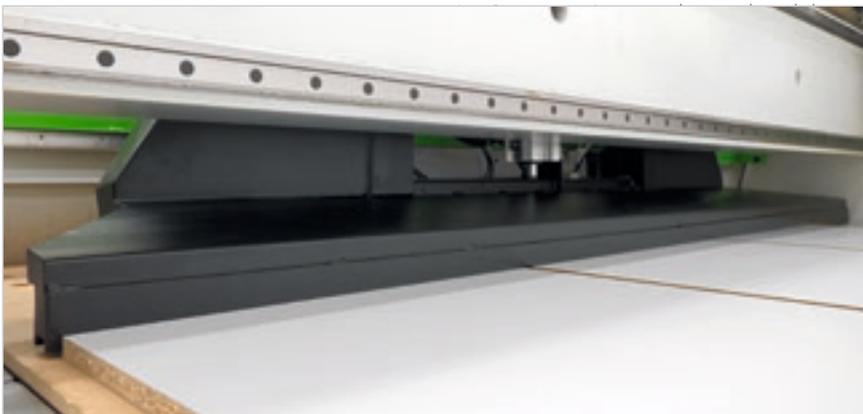
Panel identification and traceability within the production flow thanks to **automatic or manual labelling**.



# Loading and unloading solutions

Panel loading system with **scissor lift** and automatic panel alignment. The system's ease of use ensures long term reliability.

The **loading panel** enables the handling of both porous and non-porous materials of thicknesses greater than 9mm, whilst also offering automatic labelling.

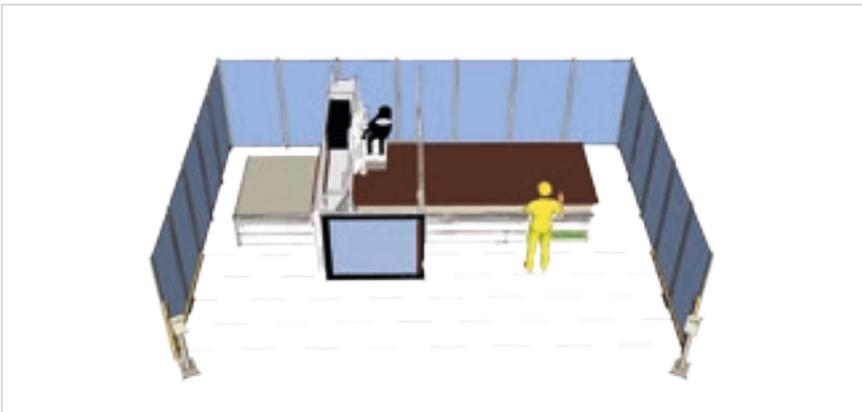


Machine efficiency is dramatically increased due to the **unloading belt**, which enables the removal of completed components outside the machine's work area.

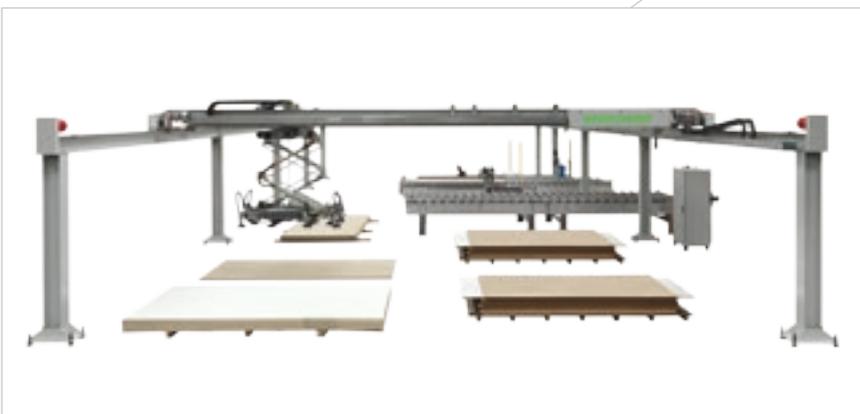
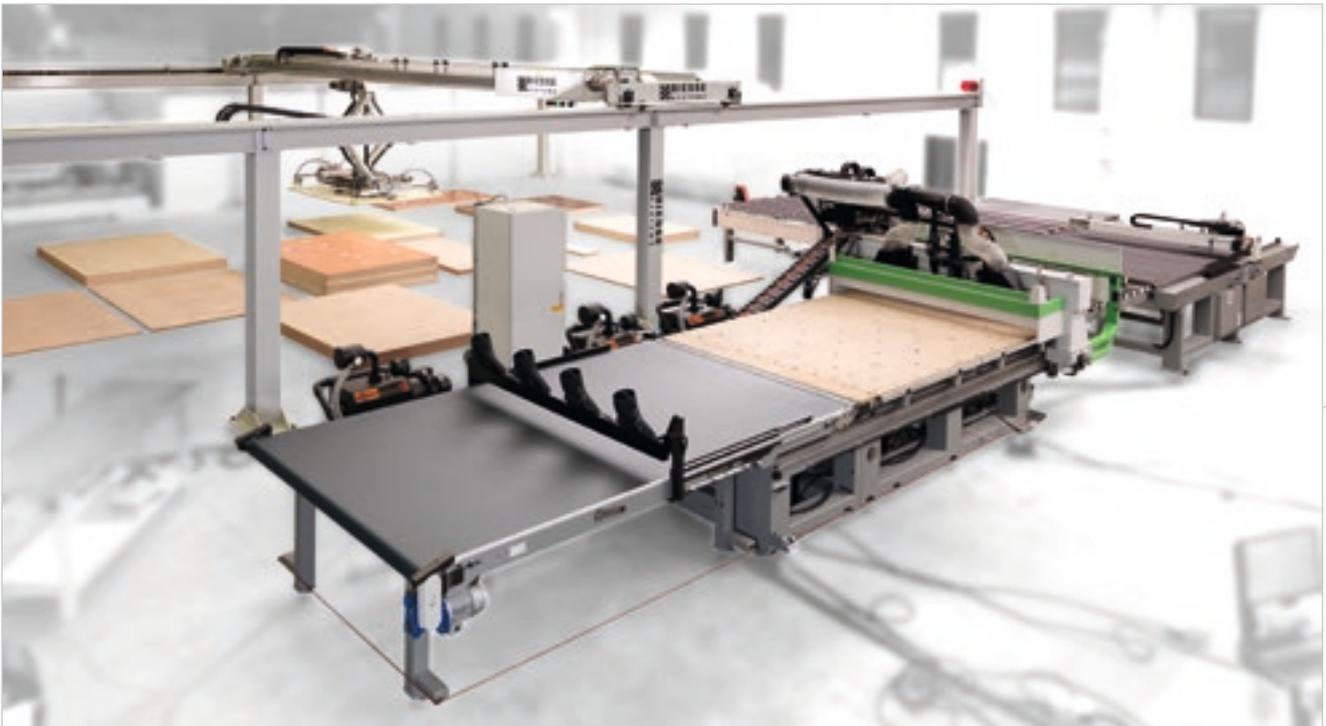
# Increasing manufacturing capacity



The machine can be configured with **tandem loading** in order to alternately process panels. This allows for loading or unloading to be carried out during machining operations.



Biesse can provide a variety of integrated solutions depending on specific productivity, automation and footprint requirements.

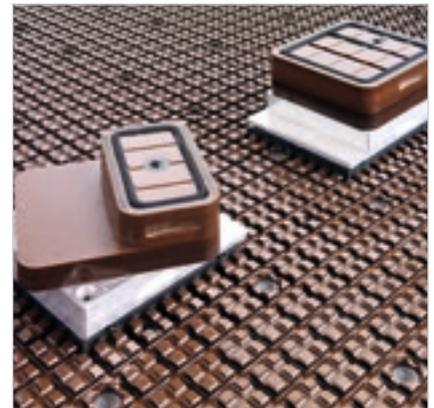
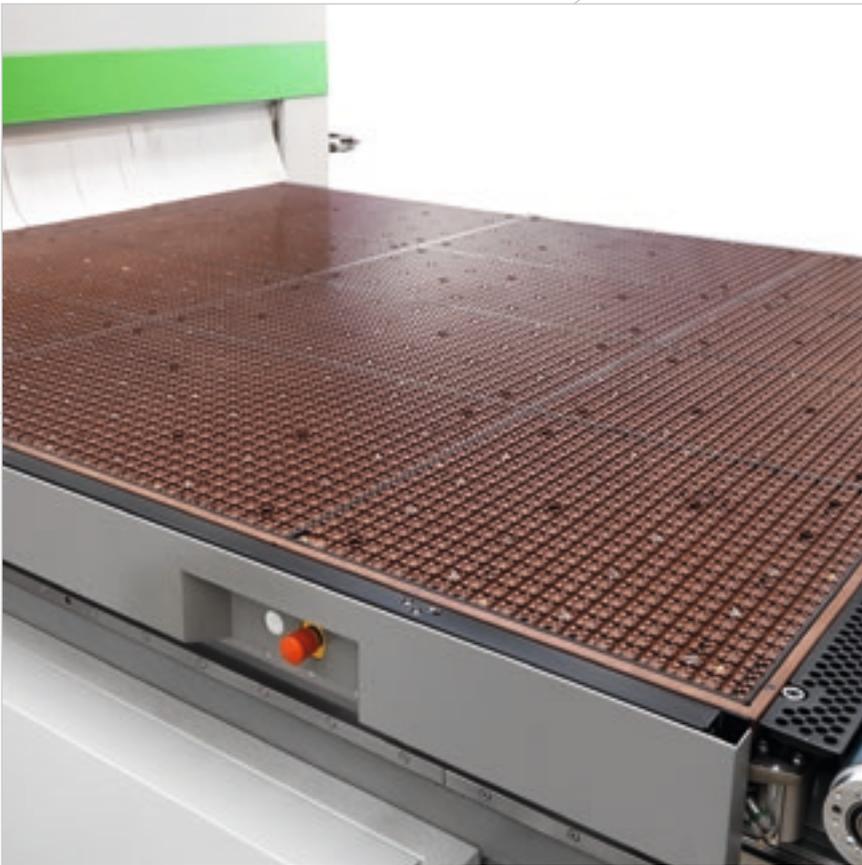


One of the solutions that can be seamlessly integrated with Rover B FT is **RBO WNS**, an automated storage system for optimised panel management, ideal for working cells where the sheer quantity and variety of material requires the flexibility of a loading system.

# Handling both small and large panels of varying thickness.

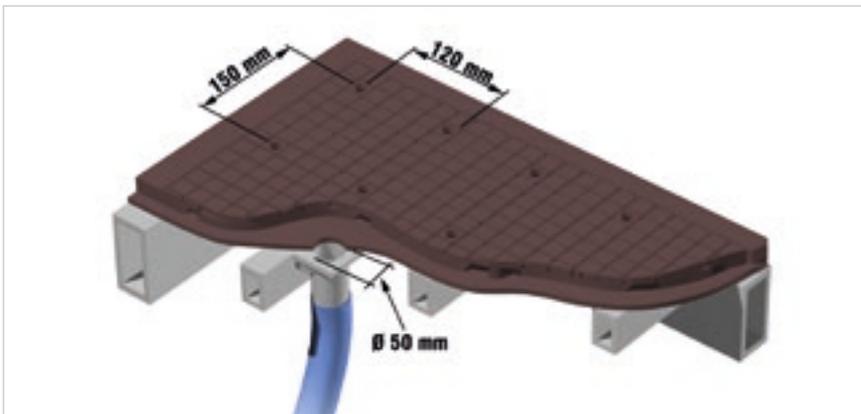


Advanced **work table** technology to machine panels of different types and sizes with the utmost reliability.



**Vacuum modules** freely positionable on the FT work table without the need for dedicated connections.

Maximum panel security thanks to an advanced distributed vacuum system within the work table.



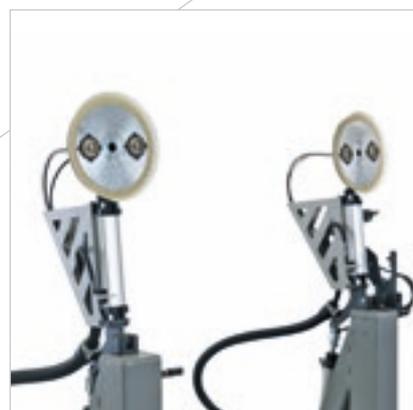
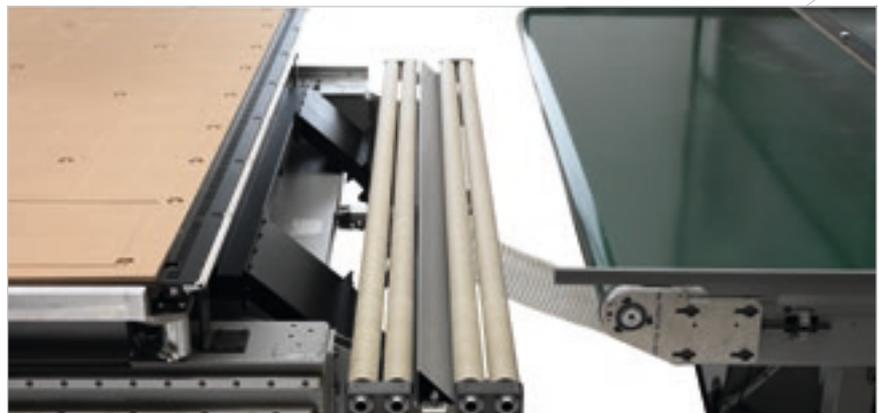
**Multi-zone** technology able to concentrate the vacuum in smaller areas of the work table where required, in order to hold smaller components and reduce vacuum loss.



The **pressing roller** supports machining of up to 3 stacked panels for sofa frames etc and thanks to the automatic unloading function, there are no limits to the use of machining heads.

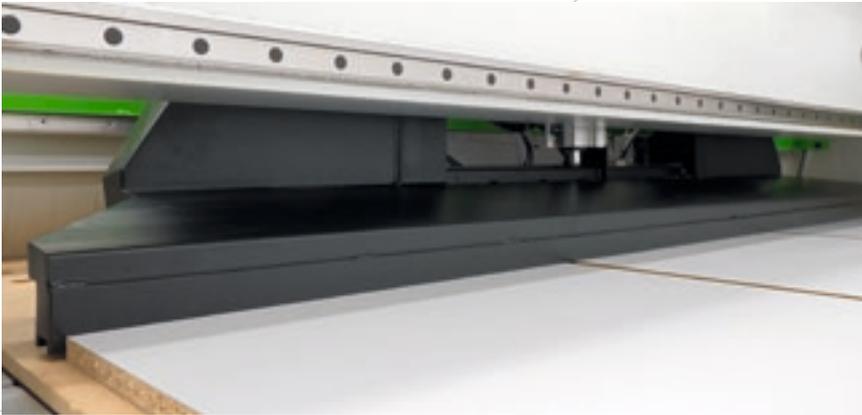


The **loop presser** supports the machining of curved and stacked panels by applying pressure to the upper surface of the panel.



The **compressed air-blowing system** within the suction pads enables the detachment of thin and porous stacked panels.

# Optimal cleaning of machined components and work area



The **sweeper arm** with integrated suction supports the simultaneous cleaning and unloading of panels, avoiding manual intervention.

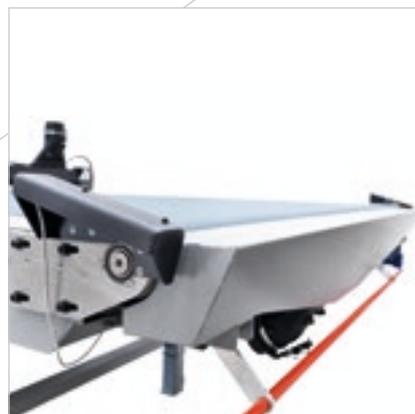
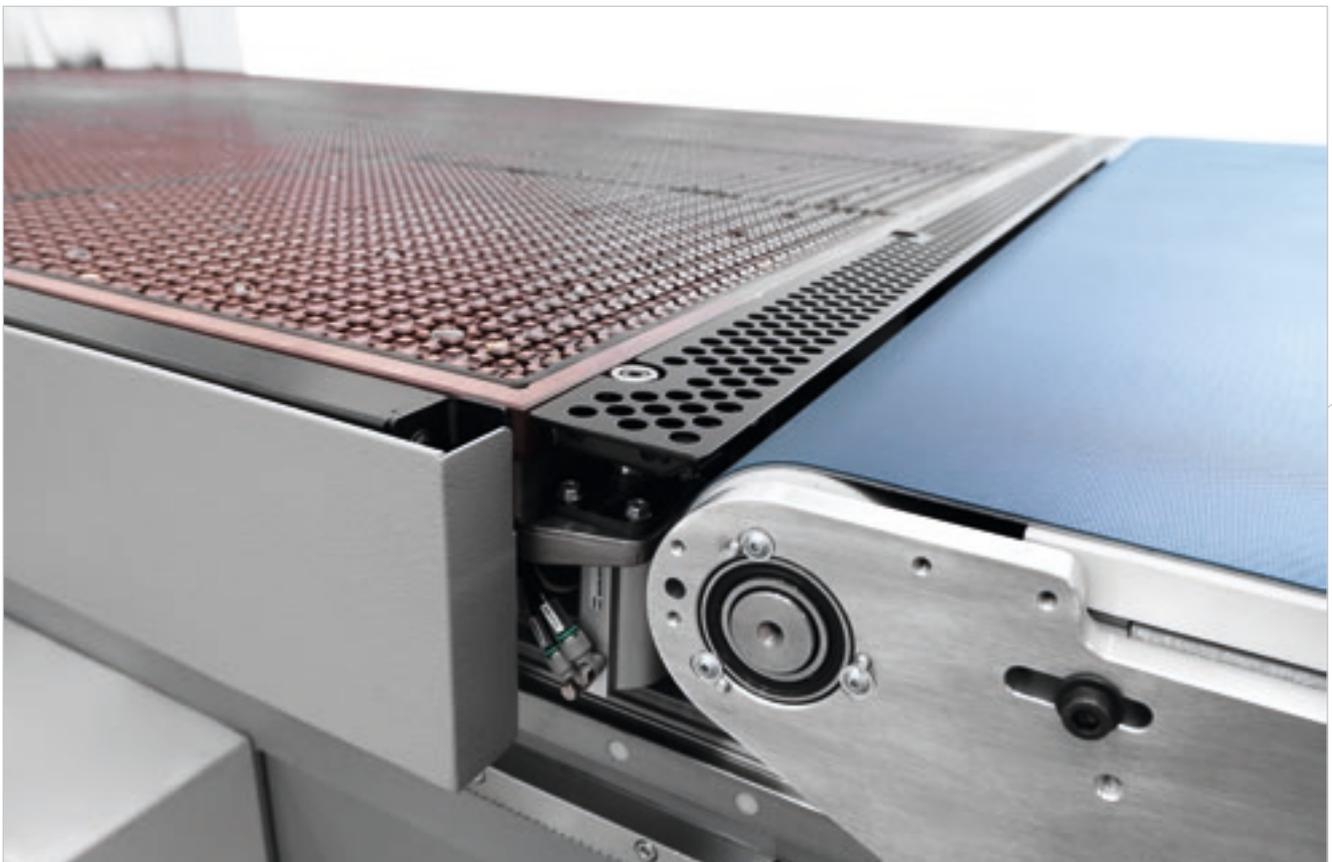


Adjustable **suction hood** with 6 settings.

Various automatic machine and component cleaning options are available which saves operator time.



**Vacuum aspiration from below**, between machine and unloading belt.



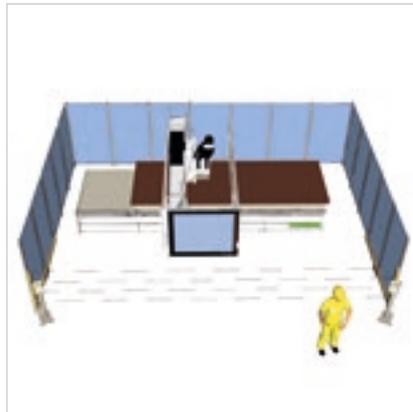
**Additional aspiration kit for unloading belt** consisting of 2 suction hoods, on the top and end of the belt.

# Maximum operator safety

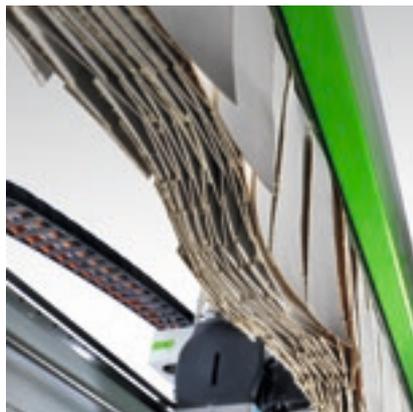
**Biesse machines are designed to enable operators to work in complete safety.**



Long term safety and reliability thanks to the new **bumpers** combined with **photocells** with no footprint or mechanical wear.



**Perimeter guards** with access door and safety device to prevent accidental contact with the machine.



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.



Working unit **total protection**.



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



**Remote control panel** for direct and immediate operator control.



# 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.

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

ROVER

# 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.

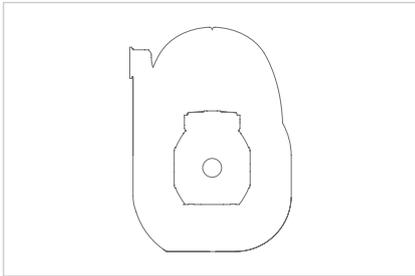
Watch the **bSolid** ad at: [youtube.com/biessegroup](https://youtube.com/biessegroup)



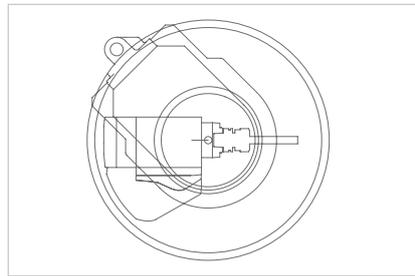
bSolid



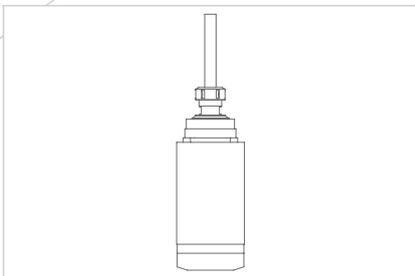
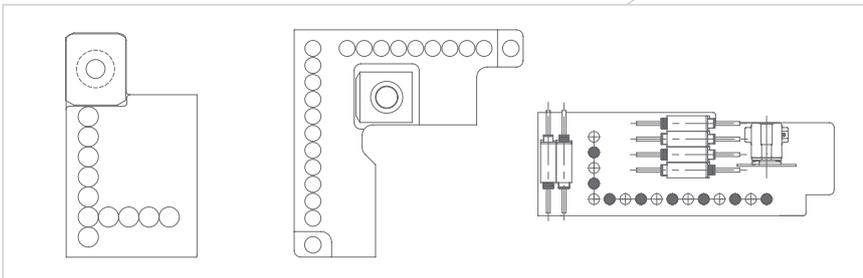
# Configuration



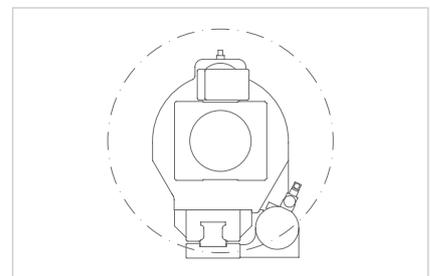
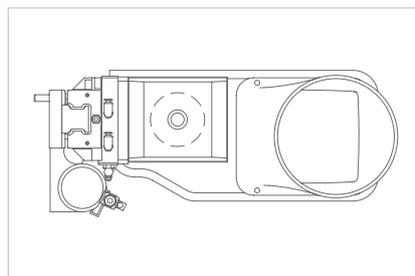
Milling unit from 13.2 to 19.2 kW.



5 13 kW axes



5.4 kW horizontal milling unit



Multi-function, with 360° rotation



# Aggregates to perform any machining operation



## Improved finish, increased productivity



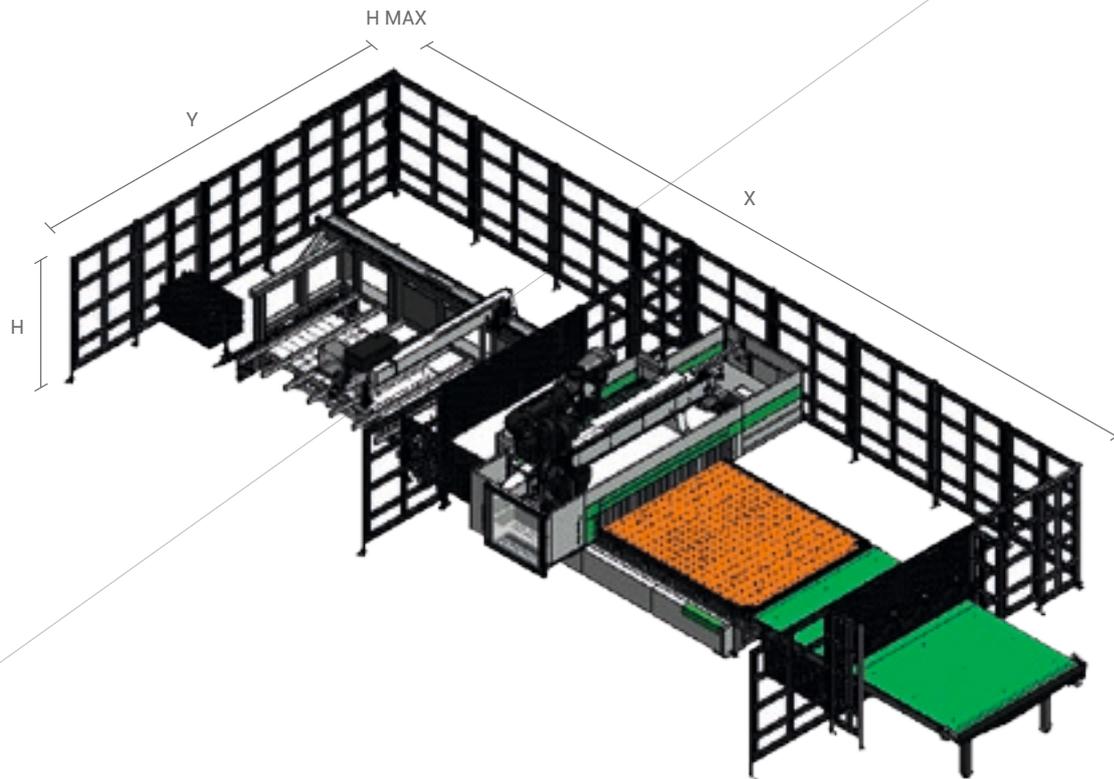
Horizontal motor with one outlet for lock routing and horizontal machining operations.

The multi-function unit, which can be continuously positioned over 360° by NC, can house aggregates used to carry out specific machining operations (pocketing for locks, hinge housings, deep horizontal bores, edge trimming, etc.).



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

# Technical specifications



	X	Y	Pendular
	mm/inch	mm/inch	mm/inch
Rover B FT1224	2465/97	1260/50	/
Rover B FT1536	3765/149	1560/62	1340/53
Rover B FT1564	6450/254	1560/62	2480/98
Rover B FT1836	3765/149	1875/74	1340/53
Rover B FT2231	3100/122	2205/87	805/32
Rover B FT2243	4300/170	2205/87	1405/56
Rover B FT2264	6450/254	2205/87	2480/98
	<b>4 axis version</b>	<b>5 axis version</b>	
X/Y/Z speed	85/85/35 m/min	85/85/20 m/min	
Vector speed	120 m/min	120 m/min	

	X machine within cell with left-to-right, belt-operated unloading	X machine within cell with right-to-left, belt-operated unloading	X machine within cell with right-to-left, bumper-operated unloading	X complete type A cell with left-to-right flow	X complete type A cell with right-to-left flow	X complete B type cell with left-to-right flow	X complete B type cell with right-to-left flow
	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch
Rover B FT1224	8154/321	7489/295	X	10220/403	9555/377	12886/508	12898/508
Rover B FT1536	10679/421	10015/395	10615/418	13928/549	13264/523	16624/655	16637/655
Rover B FT1564	X	X	X	X	X	X	X
Rover B FT1836	10679/421	10015/395	10615/418	13928/549	13264/523	16624/655	16637/655
Rover B FT2231	9346/368	8625/340	9248/364	11982/472	11361/448	14678/578	14717/580
Rover B FT2243	11763/464	11065/436	11665/460	15642/616	14944/589	18308/721	18317/722
Rover B FT2264	15197/599	14507/572	15107/595	20379/803	19689/776	23075/909	23062/908

\* For left-to-right configurations with conveyor belt, add 650 mm

	X machine stand-alone	X machine stand-alone with bumper	Y NCE	Y CE	HMAX
	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch
Rover B FT1224	6435/254	X	5034/199	5317/210	2290-91 (3ax) / 2500-99 (5ax)
Rover B FT1536	7738/305	8338/329	5364/212	5647/223	2290-91 (3ax) / 2500-99 (5ax)
Rover B FT1564	10404/410	11004/434	5334/210	5647/223	2290-91 (3ax) / 2500-99 (5ax)
Rover B FT1836	7738/305	8338/329	5634/222	5917/233	2290-91 (3ax) / 2500-99 (5ax)
Rover B FT2231	7125/281	7648/302	6024/238	6307/249	2290-91 (3ax) / 2500-99 (5ax)
Rover B FT2243	8278/326	8878/350	6024/238	6307/249	2290-91 (3ax) / 2500-99 (5ax)
Rover B FT2264	10404/410	11004/434	6024/238	6307/249	2290-91 (3ax) / 2500-99 (5ax)

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.

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.

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

# 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

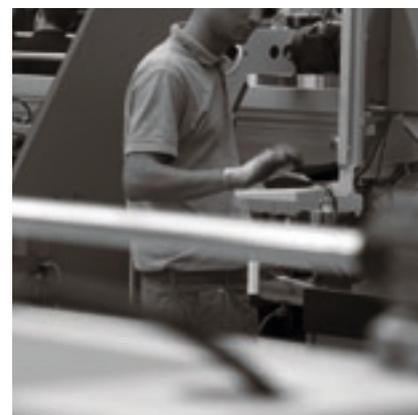
50 / Biesse engineers manning a Teleservice Centre

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

## The Sagrada Família site bets on Biesse.

The carpentry workshop of the majestic cathedral designed by Antoni Gaudí has purchased a BIESSE processing centre mainly to develop moulds for the production of stone, marble and concrete elements, as well as shuttering modules. Salvador Guardiola, a highly experienced carpenter specialised in ship-building and responsible for recreating one of the two Caravels used by Columbo during his voyage to America, has been in charge of the Sagrada Família site for 19 years. "We have chosen

BIESSE for the quality of their processing centre and their technical service", states Guardiola. "The machine cannot stop: some days, it works 24 hours over 24 and, therefore, we needed someone who is able to immediately react to any emergencies". As a matter of fact, BIESSE's technical service for the Sagrada Família site shall manage to be effective, timely and accurate thanks to the on-line service that the company offers to its customers.



# 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 resellers

With

80% of its customers abroad

We

2,700 employees throughout the world

Biesse Group

 **BIESSEGROUP**

 **BIESSE**

 **INTERMAC**

 **DIAMUT**

**MECHATRONICS**

