# RO VER BFT HIGH DYNAMICS

## HIGH-PERFORMANCE CNC MACHINING CENTRE



## DYNAMISM, TOP RESULTS, PRODUCTIVITY: THE NEW AGE OF NESTING

BIESSE DEFINES NEW PRODUCTIVITY STANDARDS WITH THE ARRIVAL OF HIGH DYNAMICS TECHNOLOGY. OUTSTANDING PERFORMANCE GUARANTEED THANKS TO HIGH SPEEDS AND OPTIMUM ACCELERATION LEVELS.

ROVER B FT HD is a high-performance machining centre dedicated to nesting operations. Designed to work at high speeds and with high acceleration sprints. Positioned in the market as one of the most productive machines ever. The Rover B FT HD is aimed at companies wanting to boost their production and enhance performance, maximising their levels of productivity, efficiency and optimisation whilst ensuring total safety.

## **ROVER** B FT HIGH DYNAMICS

- **\* EXTREMELY RIGID STRUCTURE FOR UNPRECEDENTED RESULTS**
- **F HIGHER PRODUCTION YIELD AND FLEXIBILITY**
- PROTECTION AND SAFETY FOR ALL MACHINING OPERATIONS
- **r** NEW SYSTEM LAYOUTS THAT ARE MORE COMPACT AND PRODUCTIVE

+40% INCREASE IN PRODUCTIVITY +40% INCREASE IN SPEED +100% INCREASE IN ACCELERATION

## EXTREMELY RIGID STRUCTURE FOR UNPRECEDENTED RESULTS

Extremely high results are guaranteed by highlevel hardware and software solutions.





**HIGH-PERFORMANCE TWIN DRIVE** Vectorial speed of over 170 m/min and the maximum acceleration of the sector, thanks to boosted motors, drives and transmissions that reduce waiting times in corners or during reversals, drastically cutting cycle times.



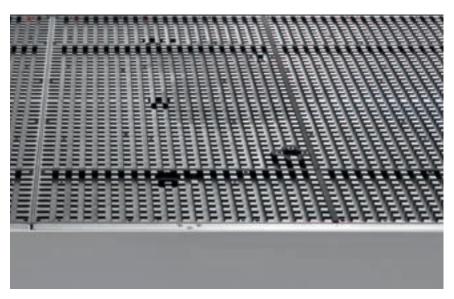
Oversized rack guides and pinions for movements on the X and Y axes, to obtain the maximum speed and acceleration in this category. Machine stability during movements is enhanced, thereby increasing the level of machining precision and quality.

Total absence of vibrations, even during machining operations at high speed or on small pieces, thanks to the solidity of the base structure which is designed to withstand higher machining stress without compromising the quality of the product.

## MAXIMUM PIECE RETENTION, LOWER CONSUMPTION

All Biesse's FT tables can adopt multi-zone technology, allowing the clamping area to be adapted to the panel format used.





#### HFT

is based on our customers' experience, for machine solutions with loading and unloading, with breathable materials combined with the roller presser.

#### VACUUM FLOW SECTIONS ENHANCED BY 300%.

#### DYNAMIC VACUUM

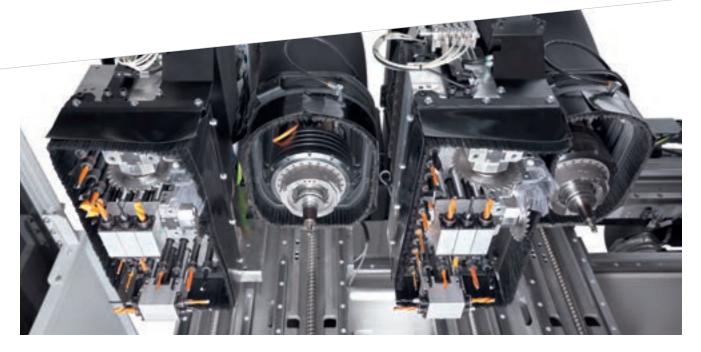
An innovative system that concentrates the vacuum in the machining area, enabling the clamping of critical pieces (up to 100x100 mm) made of breathable material chipboard or MDF. The advantages are countless:

- Reduction in energy consumption of 25%
- Lower noise levels
- No need for a vacuum pump in larger sizes
- Quality guaranteed
- Fast return on investment

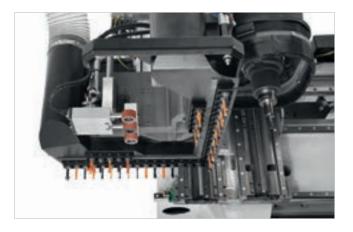
Reliability linked to the traditional Biesse experience and technological innovation.

## MAXIMUM MODULARITY AND FLEXIBILITY OF THE WORKING UNITS

Excellent results, thanks to the possibility to equip the machine with a twin configuration to maximise production and boost machine performance.







BHZ22 drilling head for maximum nesting drilling capacity with twin configuration. The best productivity levels in its category.

BHC42 boring head: top-of-the-range performance thanks to liquid cooling, automatic lubrication and dedicated suction on the spindles.

High number of tools available on the machine, and extremely simple magazine tooling.



**EXCELLENT PERFORMANCE GUARANTEES HIGH PRODUCTIVITY** Configuration with 2 identical working units, to maximise production.



22- or 33-place chain magazine with fixed floor position, available with single or dual configuration.









## DESIGNED FOR SPEED

Top speed and acceleration are what characterise the Rover B FT HD, the nesting machining centre designed to guarantee outstanding results and unprecedented productivity levels.

With Rover B FT HD, new performance levels can be reached in nesting applications and new system layouts, more compact and productive, are made possible. Extremely rigid structure, boosted drives and absolute synchronicity, highly robust working units, optimum work table supporting efficiency, powerful suction, guards and optimum safety: Rover B FT HD, the new «state of the art» of nesting CNCs.



## ADVANCED LOADING SOLUTIONS, UNPARALLELED RELIABILITY



**Rollers, for aligning** the individual panel or a stack of panels, ensure maximum load precision.



The numerically-controlled drive system enables the correct number of panels to be loaded, introducing a totally innovative approach to loading flexibility.



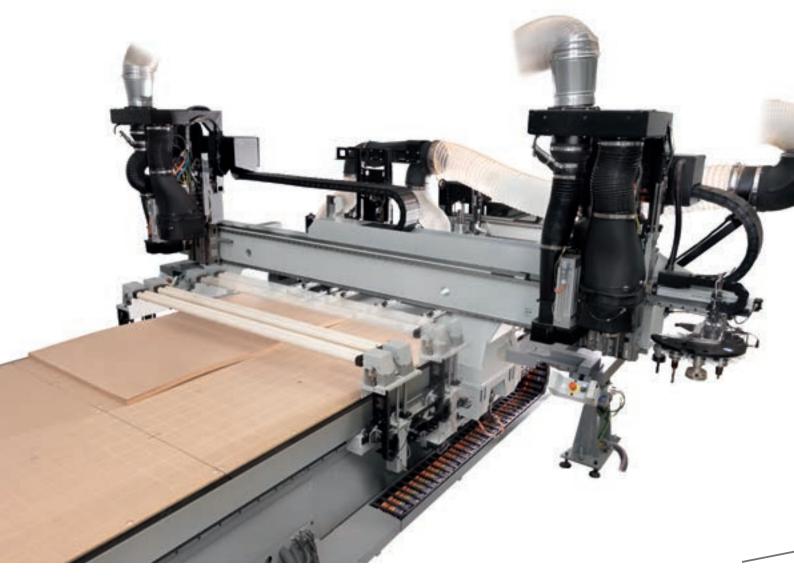
The **gripper loading system** allows both single and multiple panels to be safely and accurately loaded into the machine, significantly increasing productivity.

## INCREASED PRODUCTION

### Biesse boasts extensive experience in the machining of breathable materials arranged in overlapping panels.

The roller presser enables the processing of several overlapping panels of breathable material, up to 3 raw chipboard panels 18 mm thick.

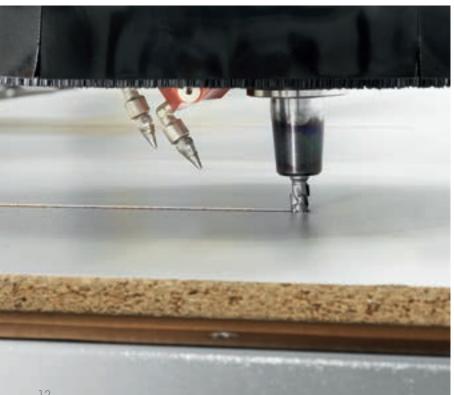
Highly effective system for machining panels up to 50% the size of the maximum loadable panel (width values much narrower than the area covered by the rollers).



## HIGH SAFETY STANDARDS GUARANTEED BY THE MACHINE IN THE CAB

## **T-JET PATENTED TECHNOLOGY**

**%BIESSE** 



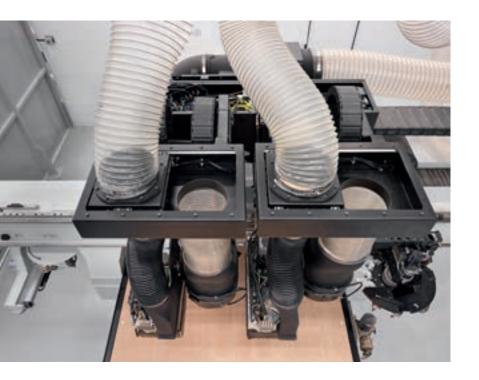
#### T-JET is the solution patented by Biesse,

for removing woodchips and dust during milling operations. Together with the C torque axis, the device follows the trajectories perfectly, ensuring the total cleaning of the channels and side surfaces in one single step. Advantages guaranteed even in the narrowest corners or with changes of direction. Combined with the new suction hoods, it enables the perfect execution of machining operations in a smooth, precise manner, offering numerous advantages:

- LESS DUST AND FEWER
  WOODCHIPS ON THE TABLE,
  AVOIDING THE RISK OF DAMAGE TO
  THE SURFACE OF THE PANEL
- TOTAL CLEANING OF THE SIDE SURFACES OF THE PIECES
- EFFECTIVE SUCTION GUARANTEED EVEN AT HIGH FEED SPEEDS
- UNPRECEDENTED FINISHING QUALITY



The cab that surrounds the machine is fitted with doors that can be fully opened from the front, to facilitate manual operations. The large inspection windows guarantee immediate visibility for direct machine-operator contact.



### DUST-FREE WORKING ENVIRONMENT

Rover B FT HD has a new suction system on the working units; it's extremely effective and reliable over time, to ensure optimum cleaning of both the product and the surrounding area.

## LEAN, EFFICIENT PRODUCTION FLOW

Rover B FT HD integrates perfectly with the range of automatic magazines Winstore and the robotised solutions ROS, guaranteeing optimum flexibility, top performance and easy use to meet every type of need.



## Increased productivity and reduced production costs, thanks to:

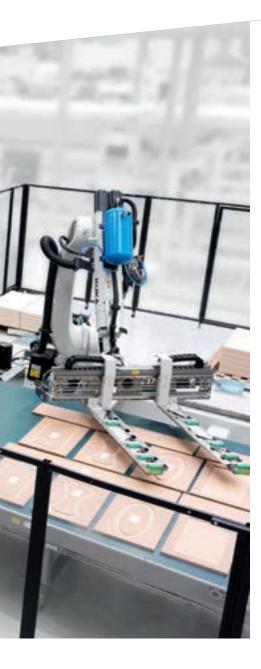
- The possibility to work on several loading/ unloading stations simultaneously according to the needs of the customer Reduced working time for the operator
- Simplification of work for the operator
- Machining operations that require no supervision and have no time limits (24/7)

#### The PLS (Picking List Smart) application allows the user to:

- View the composition of the piles being loaded into the Rover, with generation of reports to support the operator
- Integrate with the ROS nesting unloader for stand-alone machines
- Manage master data and stocks of panels and offcuts, shared across multiple machines

## **ROVER** B FT HIGH DYNAMICS

Biesse technologies are increasingly sophisticated but always user-friendly, able to maximise the competitiveness of customers wanting to boost their productivity but with reduced times and costs. The new Rover B FT HD technology offers the possibility of new system layouts that are more compact and productive, revolutionising the entire production process.









## SOLUTIONS THAT MAKE THE USE OF OUR MACHINES SIMPLER, MORE ERGONOMIC AND MORE EFFICIENT

111

### SINGLE CONTROL STATION WITH TWIN MONITORS AND LABELLING MACHINE

The machine can be controlled and labels printed (for piece identification) from a single command point. Solution that greatly enhances the machine ergonomics.

### PRINTER ON THE MOBILE CONSOLE

The printer is connected directly to the machine PC, and positioned so that everything needed for labelling is close to hand.



Biesse has developed a series of solutions that help the operator in the various work phases, making daily tasks easier. myVA is a virtual assistant for every operator.

### WEARABLE BAR CODE AND QR SCANNER

Used to upload programs in the work list, reading the information given on the label and activating the subsequent machining phases. QR codes or bar codes are read quickly and accurately, leaving the operator's hands free (unlike the classic scanner).



## REDUCED TIME AND WASTE

## B\_N

**B\_NEST IS THE B\_SUITE PLUGIN SPECIFICALLY FOR NESTING OPERATIONS. IT ALLOWS YOU TO ORGANISE YOUR NESTING PROJECTS IN A SIMPLE WAY, REDUCING THE MATERIAL WASTE AND MACHINING TIMES.** 

- Flexibility with reduced production times and costs.
- Optimisation for every type of product.
- Management of articles, sheets and labels.
- Integration with company software.





## CUSTOMER CARE IS WHO WE ARE

SERVICES is a new experience for our customers, to offer not just excellent technology but the added value of an increasingly direct connection with the company, the professionals who work there and the experience they embody.



### ADVANCED DIAGNOSTICS

Digital channels for remote interaction online 24/7. Always ready to intervene on-site seven days a week.



### A WORLDWIDE NETWORK

39 branch offices, over 300 certified agents, retailers in 120 countries, and spare parts warehouses in America, Europe and the Far East.



### SPARE PARTS AVAILABLE IMMEDIATELY

Identification, shipping and delivery of spare parts for every need.



### **EVOLVED TRAINING OPPORTUNITIES**

Lots of on-site, online and classroom training modules for personalised growth.

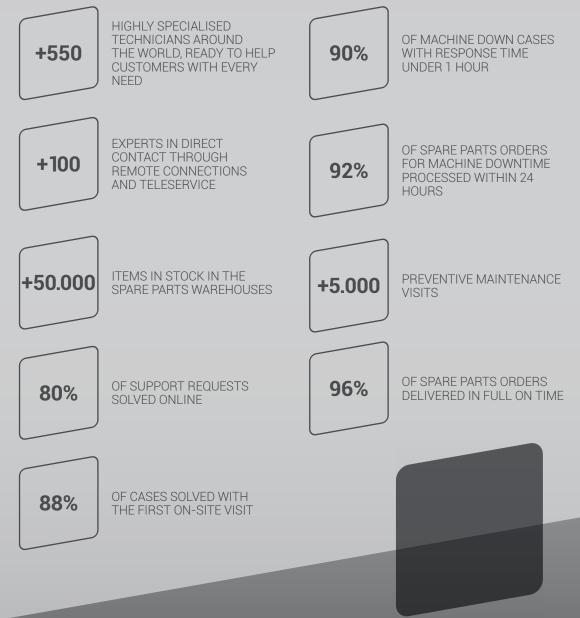


### VALUABLE SERVICES

A wide range of services and software packages to help our customers achieve continuous improvements in performance.

## **SERVICES**

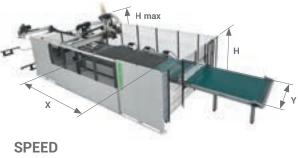




## **TECHNICAL SPECIFICATIONS**

#### WORKING FIELDS AND Z HEIGHT

		Х	Y	Z	Н	H max
Rover B FT 1531	inch/mm	122/3100	61/1560	10/250	78/1980	113/2870
Rover B FT 1536	inch/mm	148/3765	61/1560	10/250	78/1980	113/2870
Rover B FT 1836	inch/mm	148/3765	74/1875	10/250	78/1980	113/2870
Rover B FT 2231	inch/mm	122/3100	87/2205	10/250	78/1980	113/2870
Rover B FT 2243	inch/mm	169/4300	87/2205	10/250	78/1980	113/2870



	Х	Z	Vector
ft/min - m/min	420/128	115/35	564/172

#### **OVERALL DIMENSIONS - HIGH DYNAMICS**

		l	_	W		
STANDALONE		Single carriage configuration	Twin carriage configuration *	Single carriage configuration	Twin carriage configuration *	
Rover B FT 1531	inch/mm	293/7430	-	177/4490	-	
Rover B FT 1536	inch/mm	319/8090	319/8100	177/4490	205/5200	
Rover B FT 1836	inch/mm	319/8090	-	189/4790	-	
Rover B FT 2231	inch/mm	293/7430	292/7420	203/5150	231/5860	
Rover B FT 2243	inch/mm	340/8640	339/8610	203/5150	231/5860	

\* Twin carriage configurations require an extended machine beam.

#### **OVERALL DIMENSIONS - HIGH DYNAMICS**

		L	**	W		
UNLOADING ONLY		Single carriage configuration	Twin carriage configuration *	Single carriage configuration	Twin carriage configuration *	
Rover B FT 1531	inch/mm	369/9380	-	177/4490	-	
Rover B FT 1536	inch/mm	422/10710	422/10710	177/4490	205/5200	
Rover B FT 1836	inch/mm	422/10710	-	189/4790	-	
Rover B FT 2231	inch/mm	369/9370	369/9360	203/5150	231/5860	
Rover B FT 2243	inch/mm	463/11770	463/11750	203/5150	231/5860	

Twin carriage configurations require an extended machine beam.

\*\* The overall dimensions increase by 460 mm when the suction system is installed at the base of the unloading mat with removable grille for overlapping panels.

### **OVERALL DIMENSIONS - HIGH DYNAMICS**

		L**		W		
NESTING CELL TYPE B		Single carriage configuration	Twin carriage configuration *	Single carriage configuration	Twin carriage configuration *	
Rover B FT 1531	inch/mm	580/14740	-	199/5050	-	
Rover B FT 1536	inch/mm	656/16660	654/16610	199/5050	228/5785	
Rover B FT 1836	inch/mm	657/16680	-	210/5340	-	
Rover B FT 2231	inch/mm	580/14740	578/14690	224/5700	252/6410	
Rover B FT 2243	inch/mm	721/18320	719/18270	224/5700	254/6440	

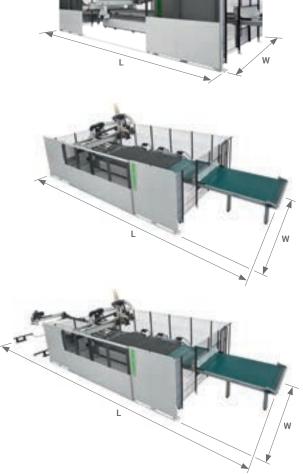
Twin carriage configurations require an extended machine beam. The overall dimensions increase by 460 mm when the suction system is installed at the base

of the unloading mat with removable grille for overlapping panels.

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 in: Operator workstation LpfA 78,5 dB (A). Loading unloading position LpfA 78 dB (A). Uncertainty factor K = 4 dB (A).

Operating conditions: drilling or milling. The measurement was carried out in compliance with UNI EN ISO 3746, UNI EN ISO 11202, UNI EN 848-3 and subsequent modifications. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Even though there is a relation between emission levels and exposure levels, this cannot be used reliably to establish whether further precautions are necessary. The factors determining the noise levels to which the operative personnel are exposed include the length of exposure, the characteristics of the work area, as well as other sources of dust and noise, etc. (i.e. the number of machines and processes concurrently operating in the vicinity). In any case, the information supplied will help the user of the machine to better assess the danger and risks involved.



## Founded in Italy, international native.

We are an international company that manufactures integrated lines and machines to process wood, glass, stone, plastic and composite materials and what will come next.

Thanks to our rooted competence nurtured by an ever-growing worldwide network, we support your business evolution – empowering your imagination.

Master of materials, since 1969.

# We simplify your manufacturing process to make the potential of any material shine.



Join the Biesse world.



biesse.com

**BIESSE.COM**