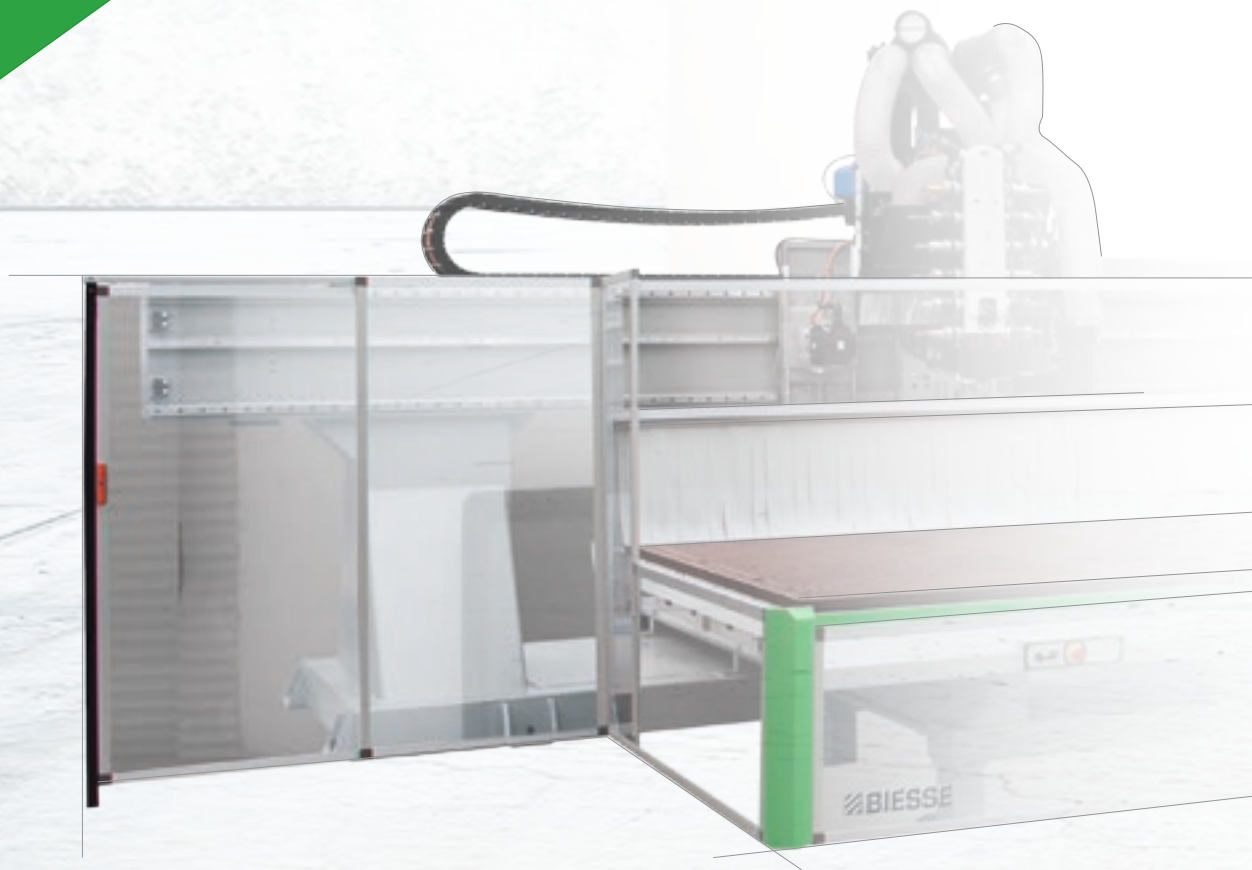


 **BIESSE EXCEL**

NC processing centre



When competitiveness
means high quality
and total flexibility



Made **In** Biesse

The market demands

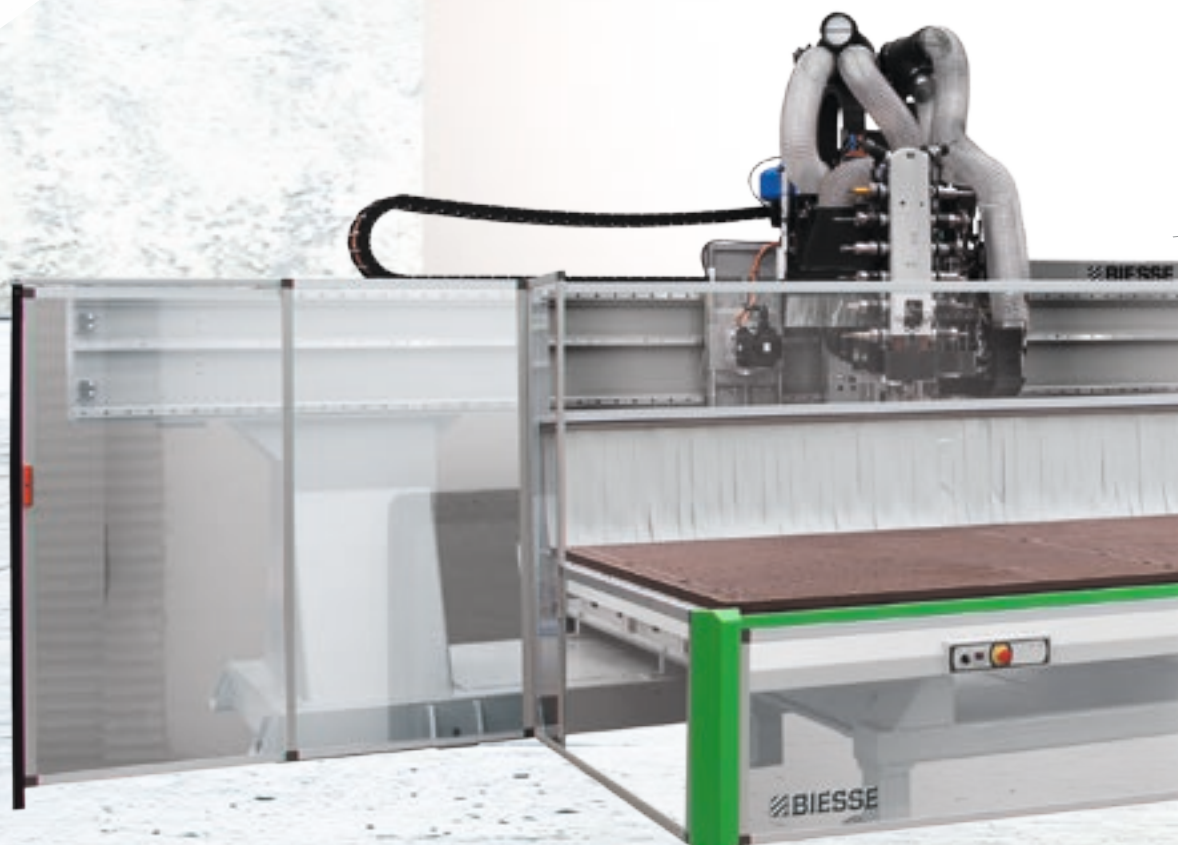
a change in manufacturing processes, enabling companies to **accept the largest possible number of orders**. This is coupled with the need to maintain high quality standards whilst offering product customisation with **quick and defined delivery times**.

Biesse responds

with **high-tech, innovative solutions** for machining large panels and more complex applications. **EXCEL** represents the ultimate in this product category in terms of reliability and flexibility for machining more challenging components, from solid wood to nesting panels, from small doors to items of furniture, frames for sofas, composite materials and light alloys. Designed for all users, from the skilled craftsman to large enterprises the Excel machining centre offers maximum flexibility and productivity.

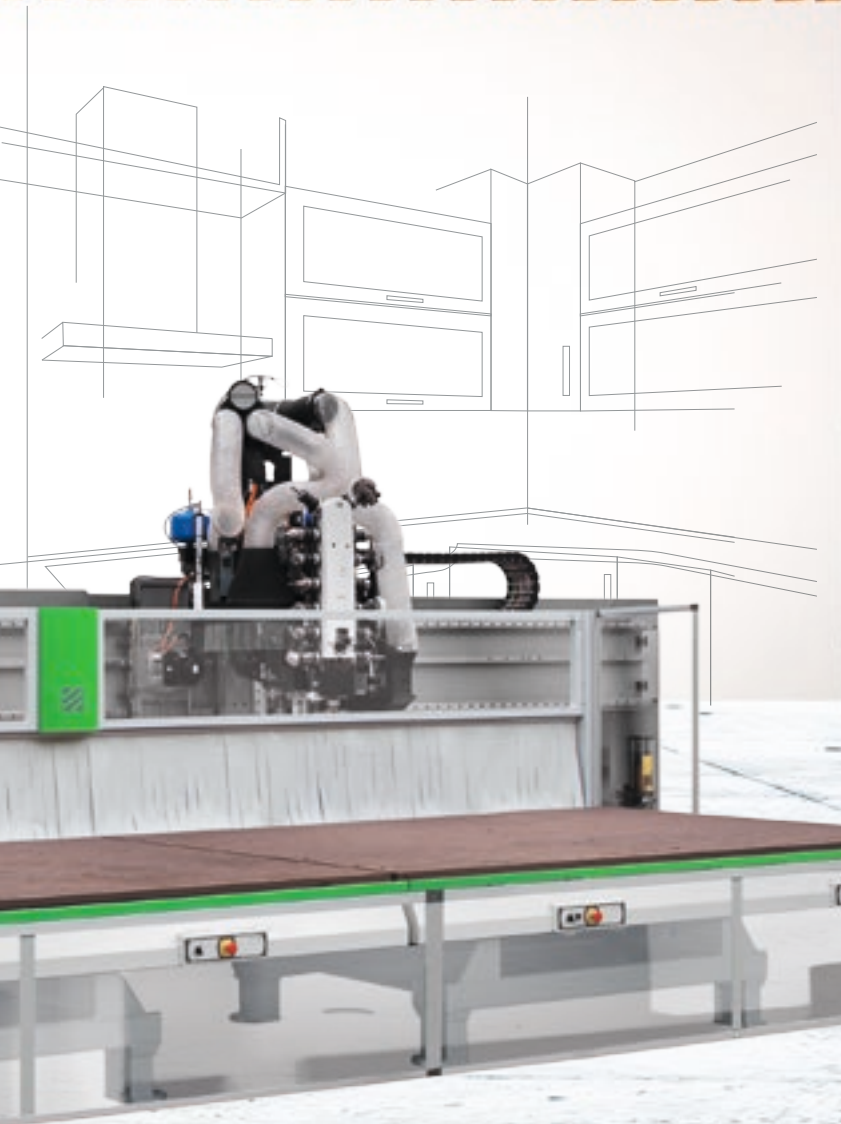
- ✓ **Total customization and modularity.**
- ✓ **Processing and execution flexibility.**
- ✓ **Maximum productivity.**
- ✓ **Integration into production systems**

Produces high
volumes of both small
and large format
components



EXCEL

NC processing centre



Total customisation

The machine can be configured according to customer processing requirements, providing all users with fully-customized modular solutions.

Two versions:
Excel MT single table
Excel TT double table



Excel double table in FT version.



Excel single table in FT version.

Excel can be configured with EPS for the ATS (pod and rail) version or with aluminium flat tables.



Excel double table with aluminium flat tables.



Excel double table in ATS (pod and rail) version.

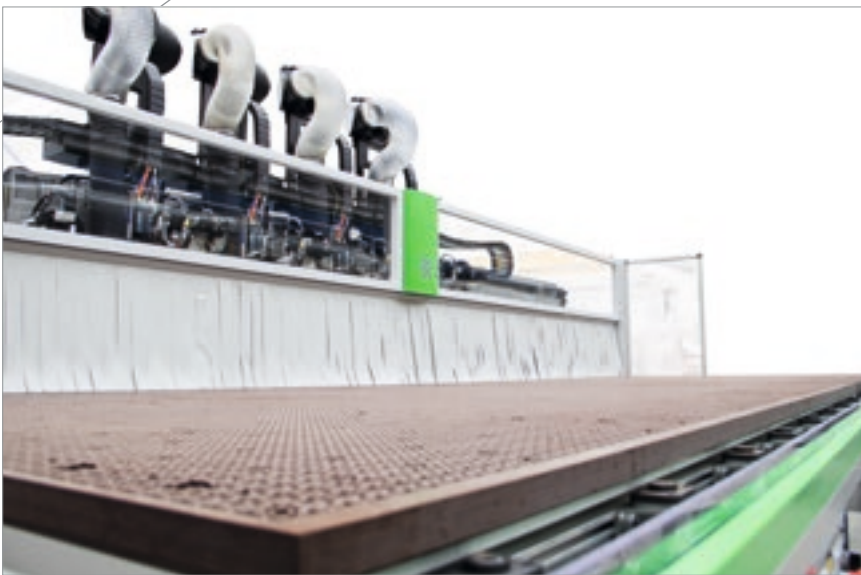
The extremely robust, rigid design, which offers exceptional performance, was created specifically to ensure processing quality and precision, particularly when machining more challenging components.

Maximum configuration of the working units for components of all sizes. Targeted solutions for each individual machining process and material.

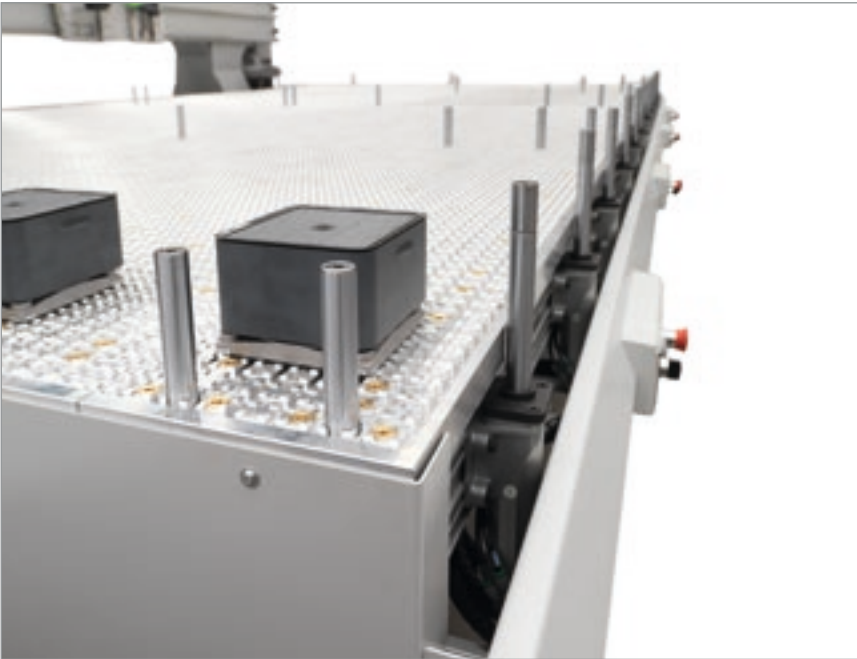


Advanced technology work tables for machining of components of varying sizes and materials

The FT work tables guarantee maximum precision as they can be 'skimmed' by the machine following installation.



Vacuum modules can be freely positioned on the flat table matrix bed.



Aluminium working tables are mainly used for the processing of light alloys where tool lubrication systems are required.

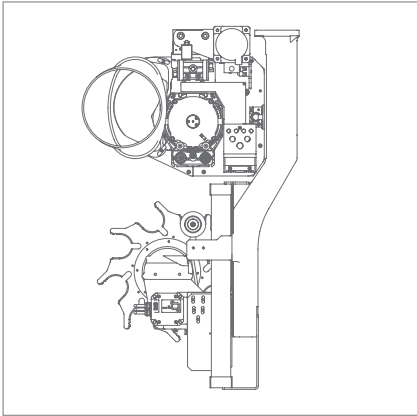
The ATS system provides maximum flexibility for holding components as well as automatic configuration via the EPS (Electronic Positioning System).



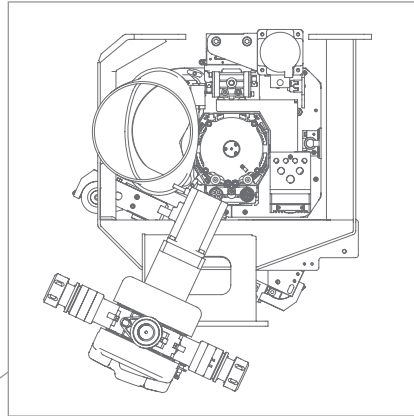
On the ATS version, the EPS (Electronic Positioning System) allows users to automatically configure the entire working area. The positioning of the pods and rails takes place via individual motors, i.e. without engaging the operating unit. The positioning of the pods and rails can be performed whilst the machine is working on the adjacent area.

Extensive configuration of the operating units

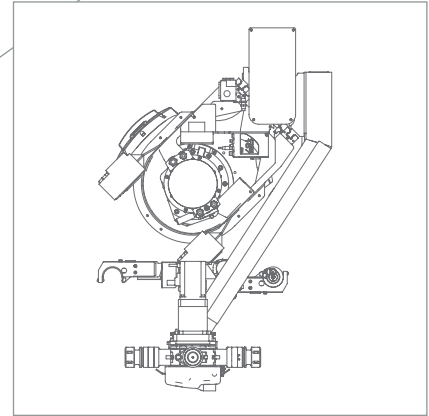
Guaranteed flexibility



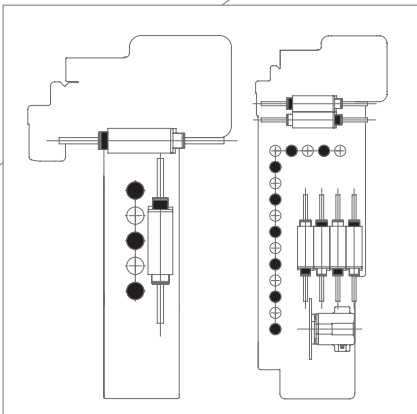
Electrospindle with 8-position tool holder.



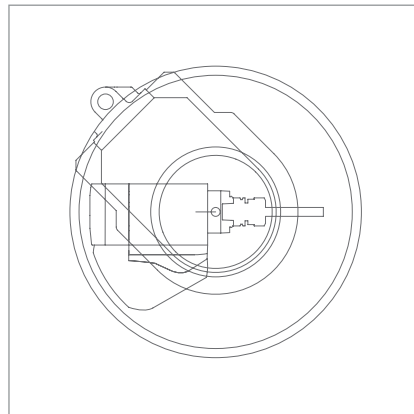
Electrospindle with 12-18 position tool holder.



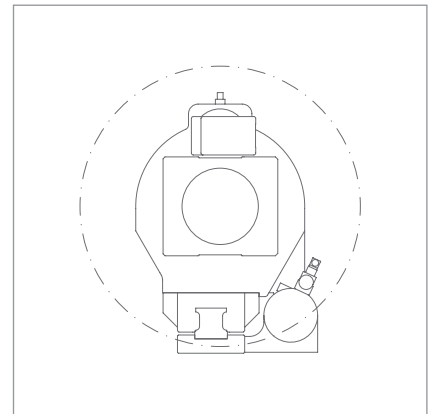
Electrospindle with 15-position tool holder.



Drilling unit for 9 to 29 drills.



21kW 5 axis head.



Multi-function unit with 360° rotation.

Unrivalled quality and precision



The cutting-edge 5-axis head enables the machining of complex shapes with maximum quality and precision

Maximum optimisation of cycle times

Maximum performance



Maximum production efficiency is achieved due to the high quality HSD electrospindles, delivering outstanding performance in terms of tool acceleration and cutting speed.

A complete range of aggregates



Tool magazines offer total flexibility whether they are mounted on carriages or within the machine, enabling maximum efficiency by eliminating the need for manual tool changes.

- ✓ Tool magazines - up to 8-12-15-18 positions on carriages.
- ✓ 22-33 positions within the machine.
- ✓ Pick-up for large tools or blades.
- ✓ Flexstore offers 44 additional positions with automatic changeover.



Total safety for the operator



The machine's perimeter protection guarantees **total safety** for the operator, whilst ensuring maximum visibility of the working units in operation.



Doubled functionality



Excel machines with two working tables and two independent heads achieves maximum configuration with up to 16 units, which can process four components simultaneously on each table.

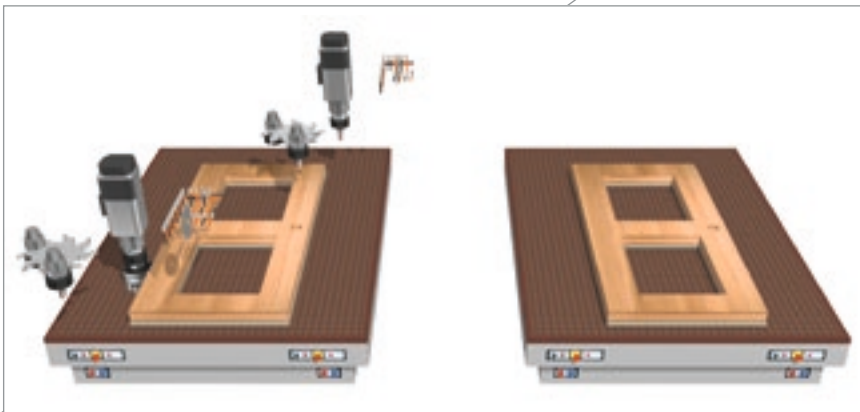
EXCELLENCE BY DEFINITION

Excellent performance with a 100% productivity increase compared to conventional processing centres. A perfect combination of Biesse flexibility and Italian genius.



High productivity achieved by processing several components simultaneously

Excel TT allows users to machine large-format components in various ways.



Alternate: Two independent operating units machine simultaneously on one table. Tool change takes place whilst the machine is running, ensuring maximum production efficiency.



Dual: Independent working on either of the twin tables.



Synchronised: two operating heads working on the same table producing identical components, thus halving production times.

Double productivity by processing two separate components with two operating heads.

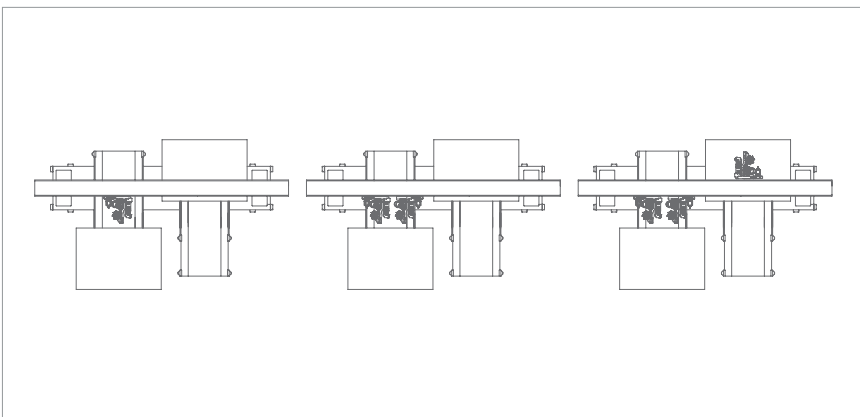
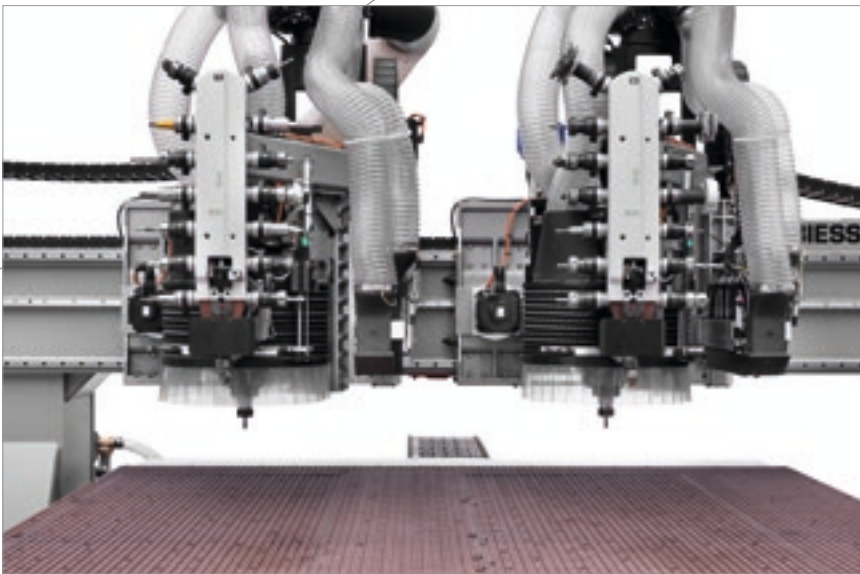


When machining large panels, the two working tables can be aligned, functioning as a single working table in gantry mode.



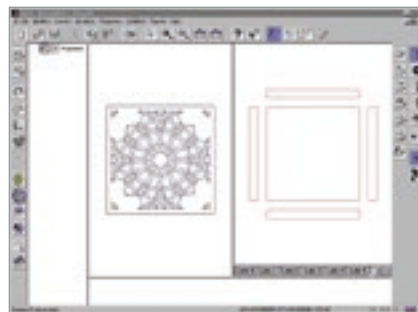
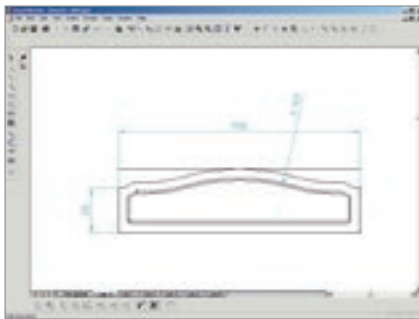
Increase performance

A range of machining options thanks to the working distance spanning from 250 to 400 mm, and up to a maximum of 1250 mm.

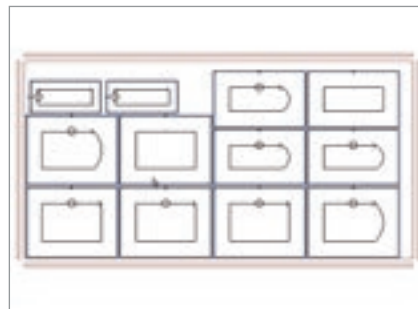
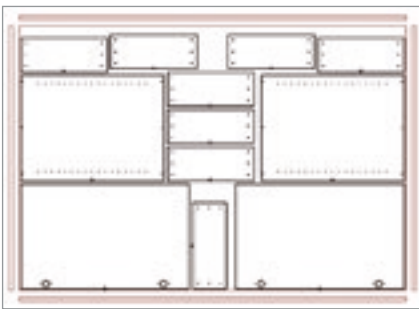


The option to configure the machine with additional independent carriages (up to two independent carriages at the front and one at the rear) allows for significant increases in performance and productivity.

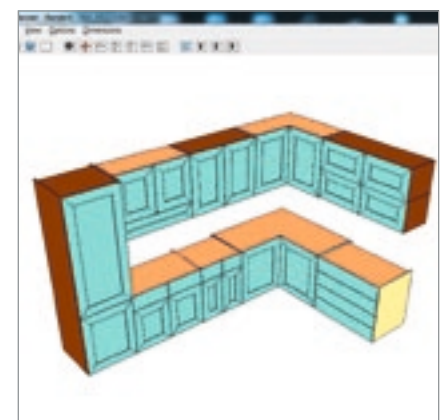
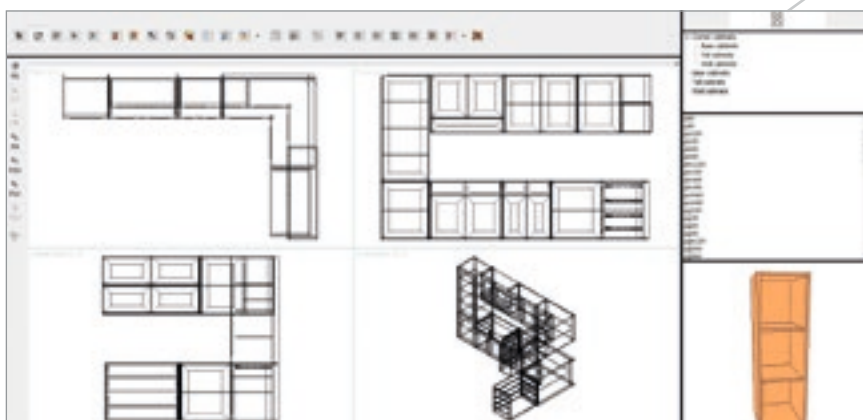
User friendly cutting edge technology



BieseWorks is the system for programming Biese machines, combining high performance with remarkable ease of use. The interface can be customised to meet user requirements.



BieseNest is a simple and effective software module, using parametric programs to prepare and optimise nesting patterns.



BieseCabinetEVO is an innovative solution for designing interior cabinets, with extensive options for viewing the project and all the required machining operations.

Automatic loading and unloading solutions

Biesse can provide bespoke solutions which are tailored to meet your specific productivity, automation and space requirements.



Robot is Biesse's custom solution for creating automatic process solutions, where flexibility and logistics are fundamental requirements.

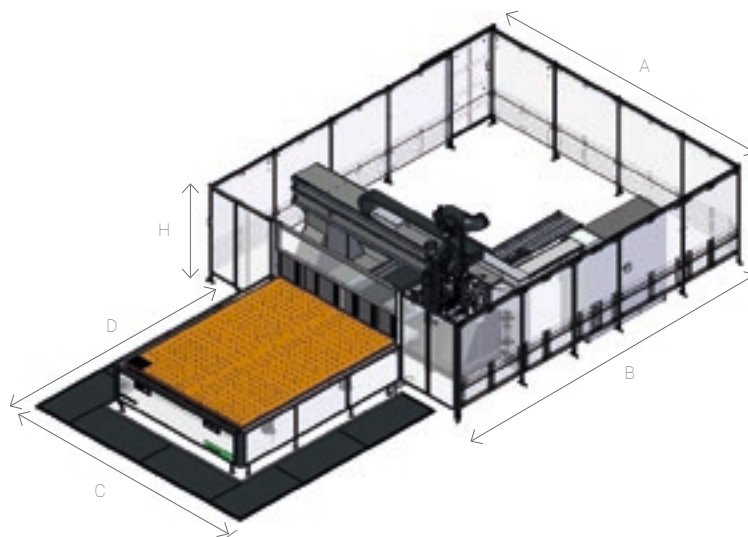
Biesse's integrated systems for loading and unloading are ideal for working cells where the variety of components, sizes and colours require a simplified management solution.



Excel is perfectly integrated into cells with WinStore, an automated warehousing application for optimised panel management, and into cells with robotic loading systems.

Technical specifications

EXCEL MT



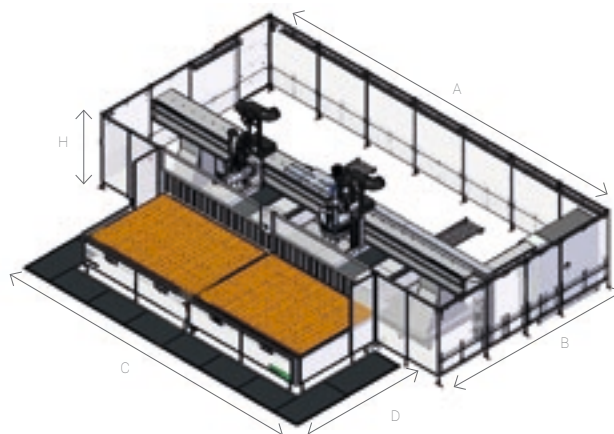
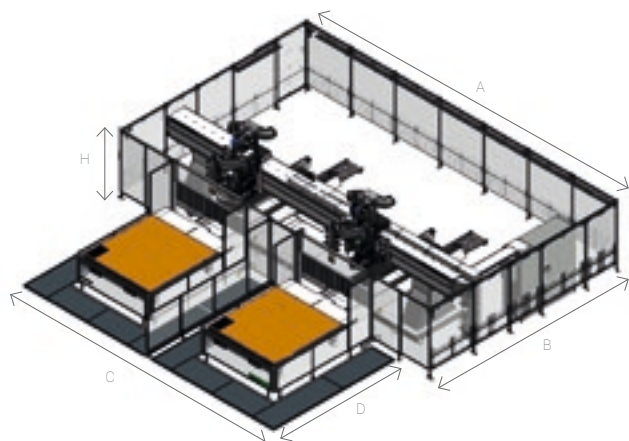
EXCEL MT FT

	Working table dimensions		A	B	C	D	H
	X	Y					
Excel M FT	2200	2600	5830	5250	4150	3200	2000
Excel M FT	2200	3100	5830	5750	4150	4100	2000
Excel M FT	2200	3730	5830	6230	4150	4700	2000
Excel M FT	2200	4400	5830	7100	4150	5500	2000
Excel M FT	2500	3820	5830	7400	4150	4900	2000

EXCEL MT EPS

	X	Y	NO. of working tables/ No. of carriages	A	B	C	D	H
Excel M EPS	2200	1525	4/16	5830	6700	4150	3000	2000
Excel M EPS	2200	1950	4/16	5830	6700	4150	3300	2000

EXCEL TT



EXCEL TT FT

Working table dimensions				A	B	C	D	H
	X	X working tables side by side	Y					
Excel TT	2200	-	2260	10340	5250	7740	3200	2000
Excel TT FT	2200	-	3100	10340	5750	7740	4100	2000
Excel TT FT	2200	-	3730	10340	6230	7740	4700	2000
Excel TT FT	2200	-	4400	10340	7100	7740	5500	2000
Excel TT FT	2500	-	3820	10340	7400	7000	4900	2000
Excel TT FT	3130	6290	2260	10340	5250	8230	3200	2000
Excel TT FT	3130	6290	3130	10340	5750	8230	4100	2000

EXCEL TT EPS

	X	Y	No. of working tables/ No. of carriages	A	B	C	D	H
Excel TT EPS	2200	1575	4 / 16	10340	6700	7740	3000	2000
Excel TT EPS	3130	1575	6 / 24	10340	6700	8230	3000	2000
Excel TT EPS	2200	1950	4 / 16	10340	6700	7740	3300	2000
Excel TT EPS	3130	1950	6 / 24	10340	6700	8230	3300	2000

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 surface sound pressure level (Lp_fA) during machining for operator workstation on vane-pump machine L_{pa}=83dB(A) L_{wa}=106dB(A) A-weighted sound-pressure level (L_pA) for operator workstation and sound power level (L_wA) during machining on cam-pump machine L_{wa}=83dB(A) L_{wa}=106dB(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

Maton and Biesse make music together.

With more than 1200 models of guitars made for thousands of professional musicians, Maton Guitars confirms its worldwide presence, becoming a truly great Australian success story. "The best guitar is the one that the market demands," states Patrick Evans, Head of Product Development at Maton. The evolution in production techniques and research into the most efficient software continues, prompting Maton to hunt for new solutions that can better respond to emerging needs. In 2008, after considering the pros and cons of a range of manufacturers, Maton chose Biesse. Maton's production needs incorporate technological requirements and artisan skills; the right balance of these two allows them to achieve the highest levels of quality and performance. A great guitar is both a work of art and a fine musical instrument. To obtain these results, the right tools are crucial - both for heavy machining operations and delicate processes, to create 3D shapes and work with minimal tolerances. Biesse has provided Maton with a range of advanced solutions for machining processes, not only adding quality to the products, but also providing the skilled craftsmen with more time to devote to manual finishes,

ensuring that every product is unique. In 1995, the company installed their first CNC machine. They now have two nesting centres in tandem. The Rover C is the ideal machine for high-precision nesting operations, but also for creating complex shapes, such as the body of Maton's unique guitars. The machine's newly-designed cabin provides excellent visibility of all working units. Biesse is much more than a manufacturer of machinery for producing kitchens. Their impressive range of machines can process an astounding range of materials and products. "In creative hands," commented Patrick Evans, "Biesse becomes the instrument of a true craftsman. The key is to identify the right machine for the job. We found we can accomplish much more than we thought on a Biesse machine." Maton also uses the two Biesse machines to create new product prototypes; the most complex shapes, and almost every individual part which makes up a Maton guitar. Patrick confirms that Maton uses the Biesse CNC machine at high speeds even on the most complex parts, such as the magnificent fingerboard. "We need enough flexibility to be able to switch from one model to another very quickly, and Biesse allows us to do

this very effectively." Biesse gives users the creative freedom to produce virtually any concept, both quickly and efficiently. "With the Biesse's CNC machine," Patrick continues, "you can turn your ideas into reality much faster. Thanks to the flexibility provided by Biesse machines, we can produce two fingerboard prototypes in seven minutes! If we made them by hand, it would take a whole day. Using Biesse machines has allowed us to create eight new guitar models this year alone." Using Biesse machines has allowed Maton to devote more time to the quality of the finish, wasting less time on processing individual pieces. Each Maton guitar is hand-finished by a dedicated and qualified team of luthiers. Maton has demonstrated that it is possible to produce a guitar in Australia with a worldwide reputation for quality, using Australian timber and technologies. Maton knows exactly how to design and build a unique, one-of-a-kind product, a well-made guitar, and with Biesse as valued partner, the best guitars in the world are brought to life.

Taken from an interview with Patrick Evans, head of Product Development at Maton Guitars - Australia



<http://www.maton.com.au>



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

33 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

3,000 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

