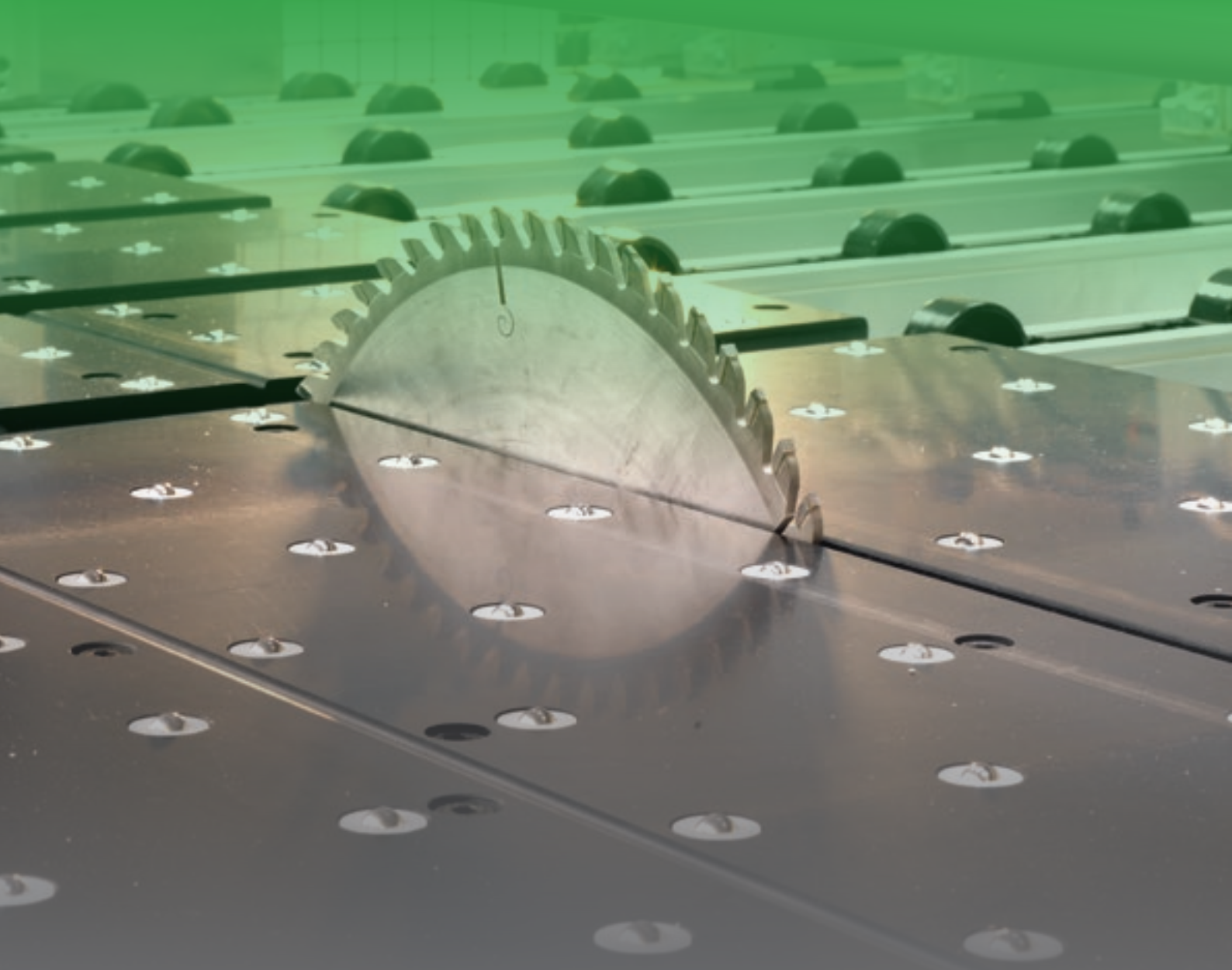


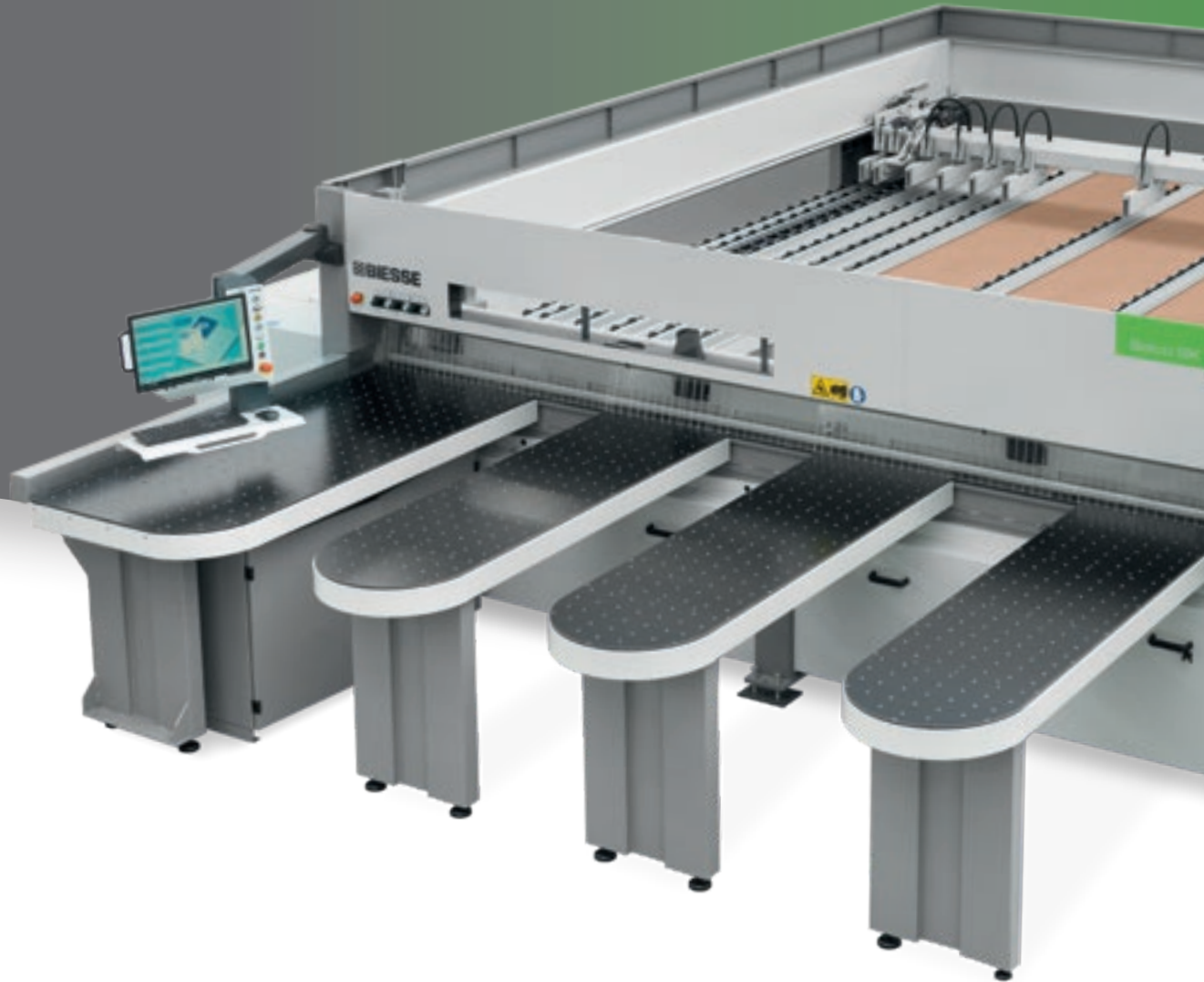
# SEL CO SK 4

NUMERICAL CONTROL  
BEAM SAW



 **BIESSE**

# INTUITIVE CUTTING-EDGE TECHNOLOGY WITH REDUCED FOOTPRINT

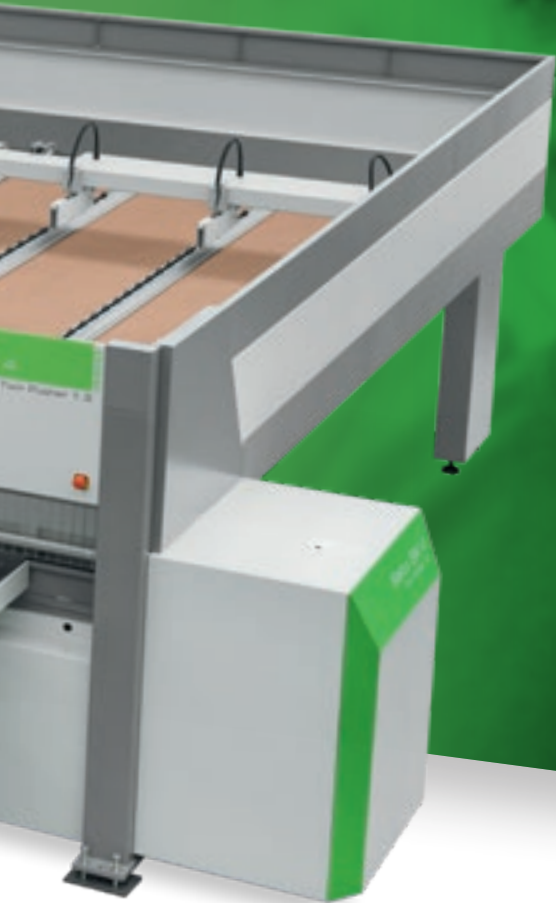


## THE MARKET DEMANDS

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 MEETS

these requirements with **technological solutions** which enhance and support technical expertise as well as process and material knowledge. **SELCO SK 4** is the range of cutting centres designed to satisfy the needs of small to medium-sized enterprises. It is easy to use, has advanced technical solutions and features great standard equipment. The SELCO SK 4 has become the reference point in its sector.



## **SELCO** SK 4

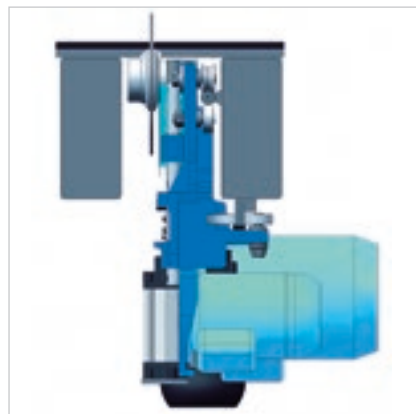
- ✔ BEST PERFORMANCE IN ITS CATEGORY
- ✔ EASY AND QUICK TO ADJUST FOR REDUCED CYCLE TIMES
- ✔ LEAN, EFFICIENT PRODUCTION FLOWS
- ✔ PRODUCTION INCREASE OF UP TO 25%
- ✔ EASY TO USE, WITH OPTIMISED MACHINING OPERATIONS.

# CUTTING QUALITY

Robust, balanced structure ensuring maximum stability. Specially-designed technologies to guarantee precision and rigidity.



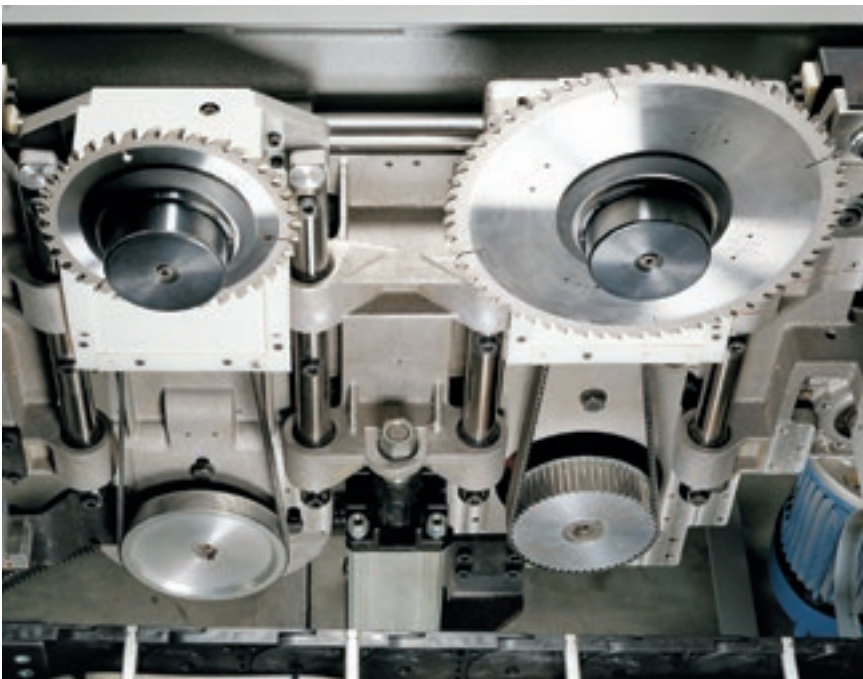
The base of the machine is constructed from solid steel, supported by robust legs which guarantee perfect stability. The carriage rails ensure the machine remains perfectly parallel and straight, maintaining optimal tool-holder carriage balance.



The blade is not subject to any vibration, thanks to the **upper guide**, positioned next to the blade-holder spindle.



The perfectly linear movement of the tool holder carriage is achieved through a helical rack and pinion system and is driven by a brush-less servomotor.



The superior cutting quality is achieved through independent rise and fall movements of the main blade and the scoring blade.

The **projection of the main blade** is automatically adjusted by the numerical control according to the thickness of the book to be cut, obtaining the best quality cut under any working conditions. On the Selco SK 450 K1, the automatic blade projection is regulated on two levels.



# BEST PERFORMANCE IN ITS CATEGORY

Unique technical solutions on the market, to satisfy even the most rigorous production demands, in terms of both precision and flexibility.



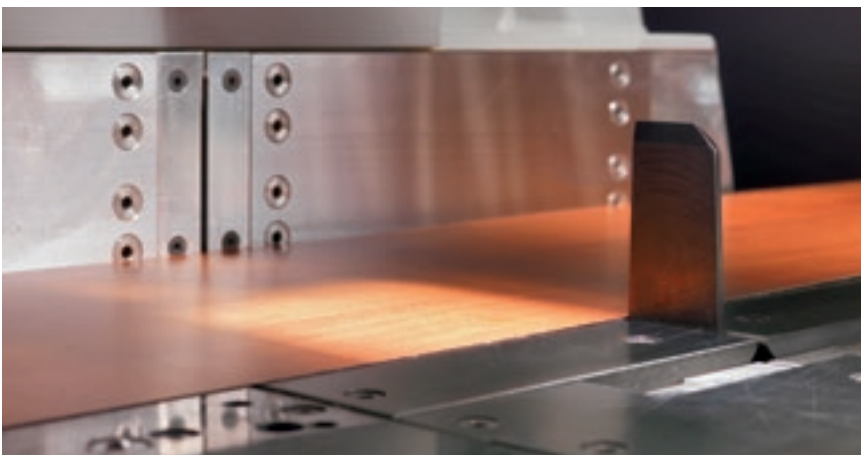
The **presser** boasts a single-element structure which guarantees consistent, controlled pressure on the book of panels to be cut. The opening is automatically optimised according to the thickness of the book of panels, in order to achieve the best cut quality and to reduce cycle times.



Fast, accurate positioning of the panels for optimum cutting precision, thanks to the robust pusher carriage activated by a brushless motor. The slide surface below the pushing device is fitted with independent rollers to avoid making any marks on panels with a delicate surface.



The self-levelling, independent grippers ensure that the panels are firmly locked in place, and allow for the full expulsion of sectioned stacks from the cutting line.



Perfect alignment of very thin and/or flexible panels, minimising cycle times thanks to the **side alignment stop** integrated in the blade carriage.



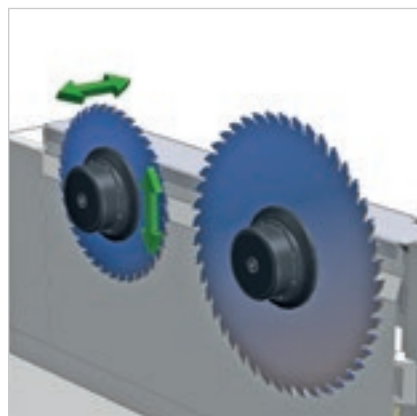
# FAST AND EASY ADJUSTMENT FOR REDUCED CYCLE TIMES



The **Quick change** system, patented by Biesse, is the quickest, safest and most ergonomic device for replacing blades without using specific tools.



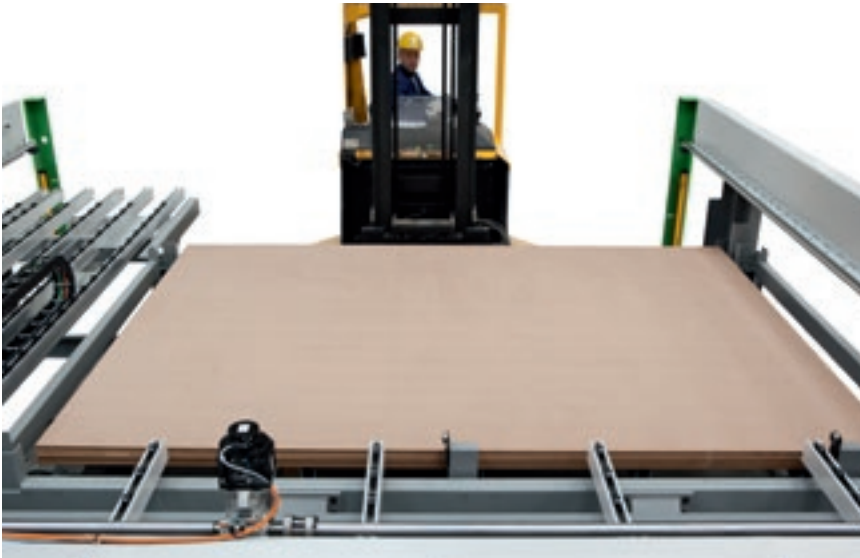
Fast, accurate setting of the scoring and main blades, using **Digiset system**. The system also stores the information for each set of blades, ensuring repeatable and accurate alignment every time.





## REDUCED PANEL LOADING AND UNLOADING TIMES

On request special solutions are available for the movement of packs and to permit the loading and unloading of panels.



The compact, integrated **lifting table** allows for packs of panels of up to 630 mm to be loaded directly onto the steel profiles. The lifting table can also be installed as an option.



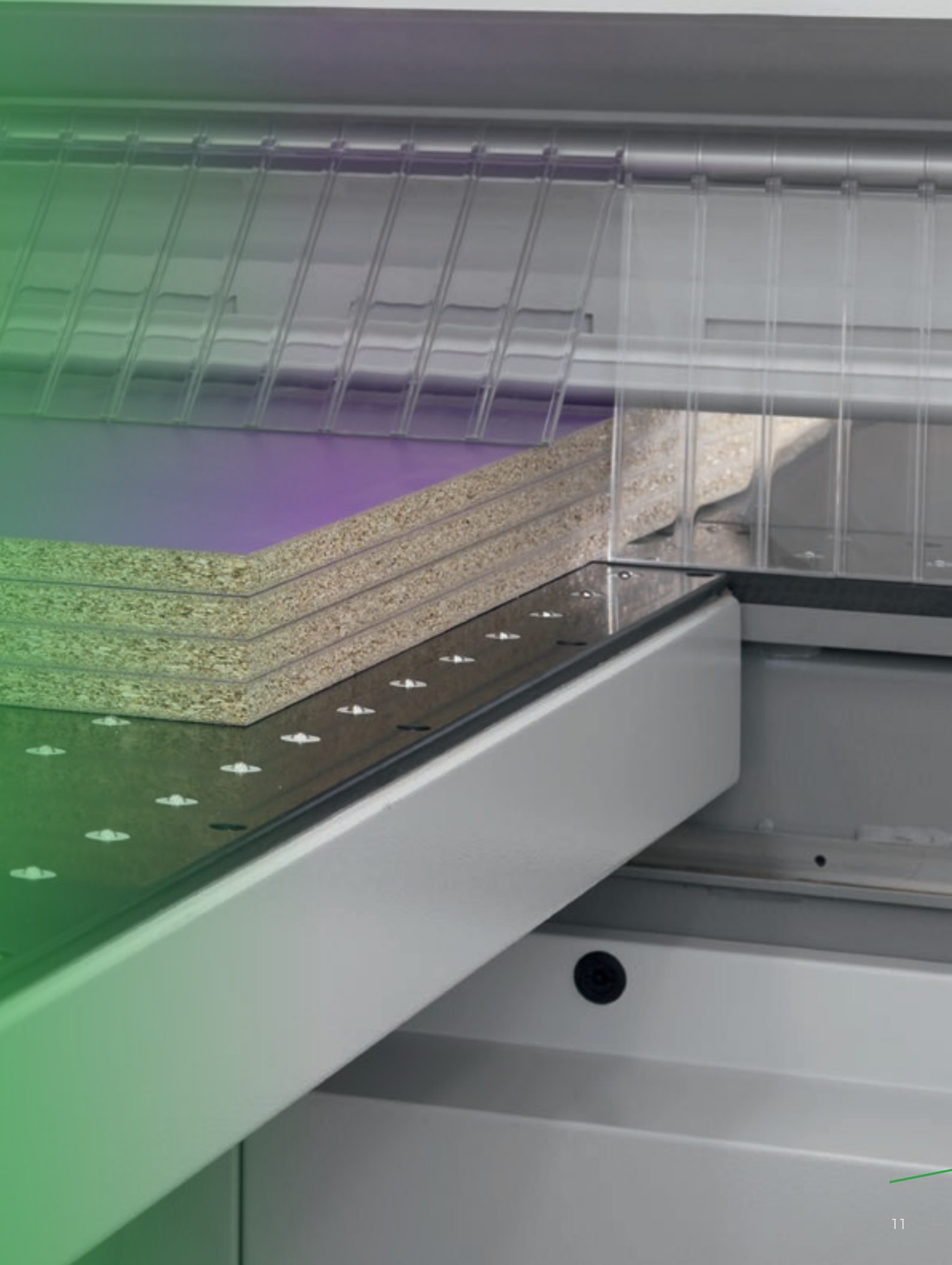
The **grippers** automatically pick up the required amount of panels according to the working programme underway, increasing the efficiency and safety of the beam saw without affecting the compact overall dimensions

# TWIN PUSH ER

## TWO BEAM SAWS IN ONE

The Twin Pusher, an exclusive patent for all Biesse beam saws, consists of two complementary pushing devices. An additional stop allows independent cutting of strips of up to 650 mm wide.

Increased productivity by up to 25%, optimum management of production efficiencies and a ROI within the first year.



# PRODUCTIVITY INCREASE OF UP TO 25%

Two cutting stations  
on a single beam saw.



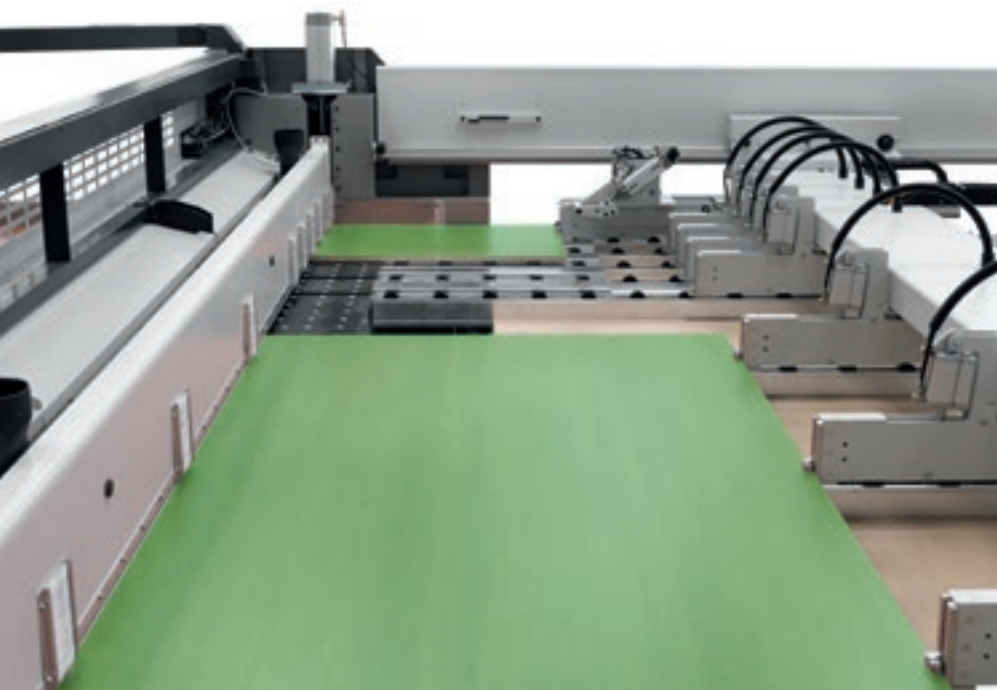
The **Twin Pusher** system offers an additional pushing device consisting of two fixed collets. It permits simultaneous cutting, which drastically reduces the cycle time.



Differentiated cross cut.



Differentiated cross cut for narrow strips.



Rip and cross-cuts are performed at the same time. An additional stop allows independent cutting of strips of up to 650 mm wide.

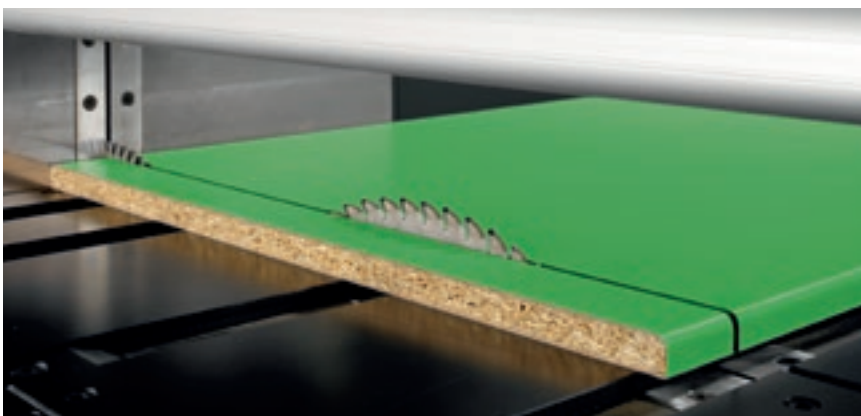
# TECHNOLOGICAL SOLUTIONS FOR EVERY MACHINING NEED



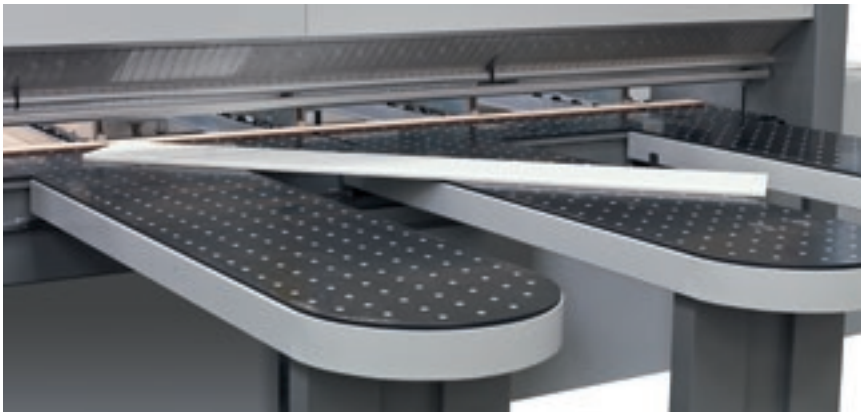
**System for the automatic execution** of grooves, the width of which can be programmed via the numerical control. The groove depth can be adjusted manually from the outside of the machine and with the blades moving.



Excellent product quality, thanks to the air cushioned working surface, which protects delicate materials. In addition, this characteristic ensures the surface next to the blade is kept constantly clean.



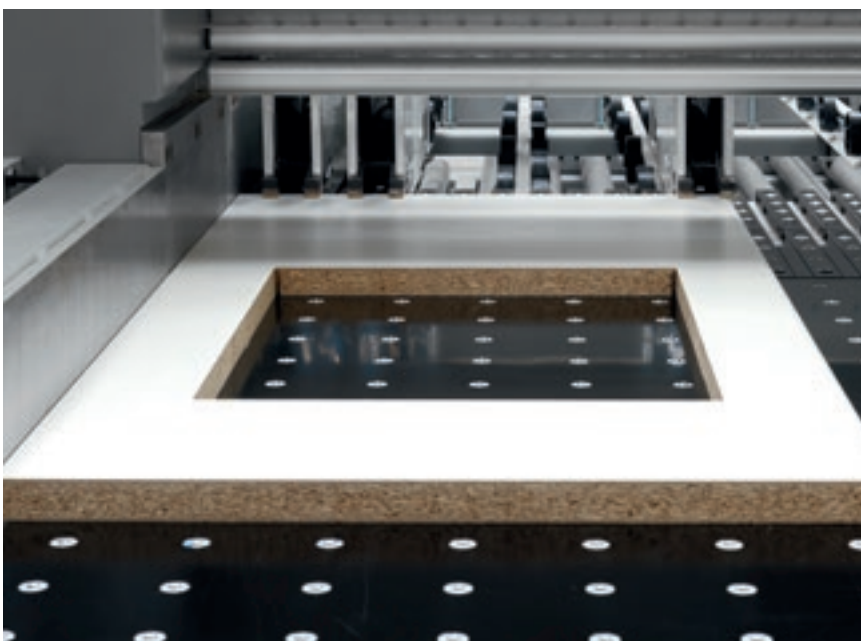
**PFS function** for making cuts on soft and post-formed panels. A special NC program that ensures the perfect finish of both the entrance point and the exit profile, preventing any splintering of fragile, delicate materials (patented).



**Automatic device** for making angled cuts.



**Grippers with specific stops** for processing books of laminated materials with protruding edges.



**Software** for making window cuts on panels. The layouts can be stored on the numerical control.

# PRODUCTION



## COMPETITIVE CUSTOMISATION

**Made-to-measure turnkey factories, plus the integration of Biesse Group solutions with complementary software and machinery, with over 1000 systems installed worldwide.**

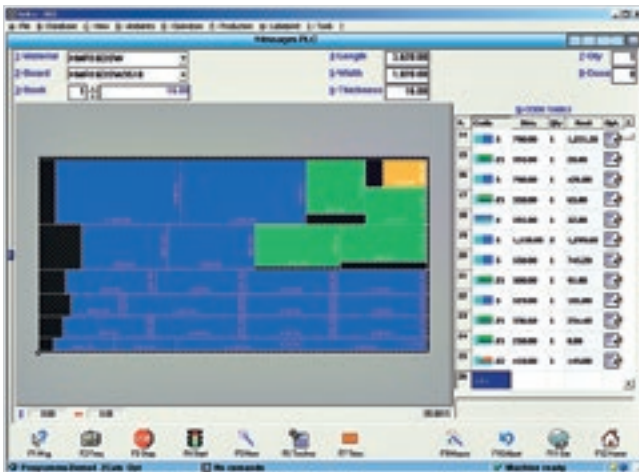
Biesse Systems is a team of highly trained engineers for large scale production processes. Biesse Systems offers integrated cells and systems that are capable of maximising customer competitiveness by combining mass production techniques with a high degree of customisation to meet customers' exact requirements.





# EASY TO USE, WITH OPTIMISED MACHINING OPERATIONS

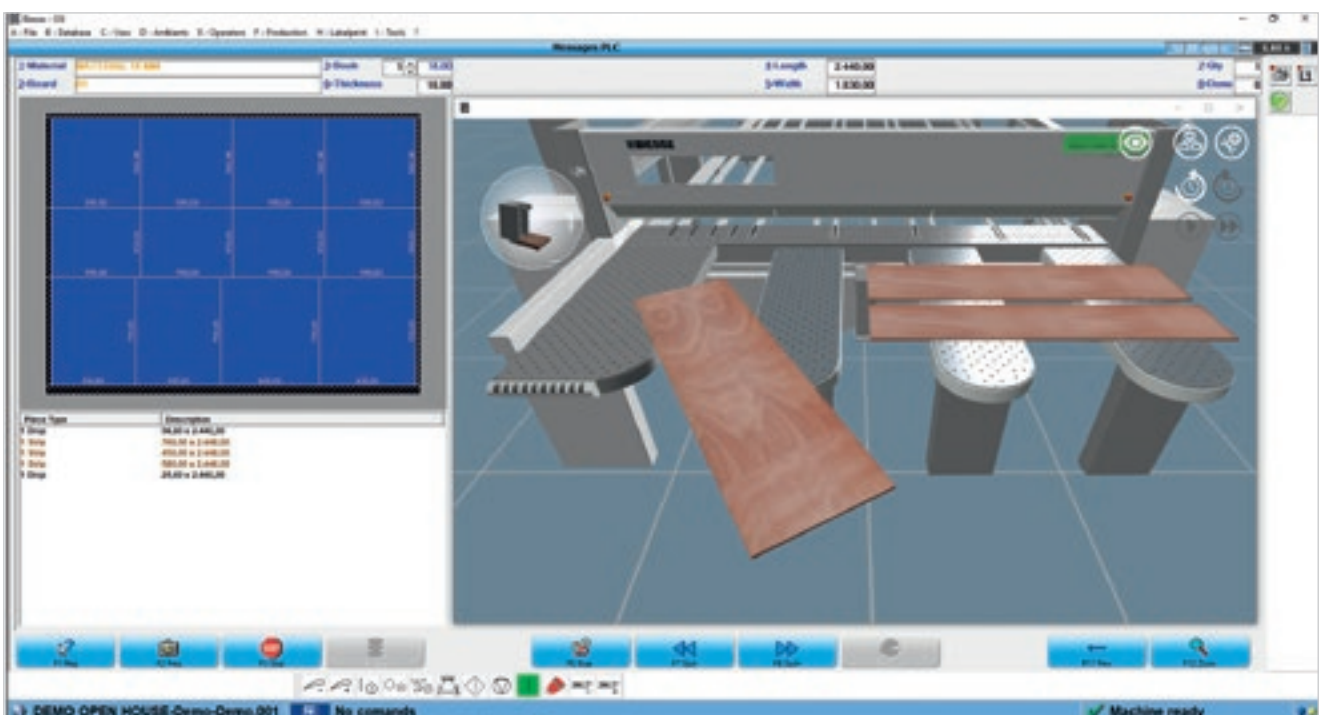
The OSI (Open Selco Interface) numerical control guarantees the management of the execution of cutting patterns, and optimizes all movements relative to controlled axis (i.e. Pusher and Saw Carriage, pressure beam, blade height). It ensures the blade protrudes from the book to the correct degree during sectioning, and calculates the most suitable cutting speed on the basis of the book height and trim cut width. It helps ensure the best cutting quality at all times.



Easy cutting pattern programming.



Graphic simulation in real time, with messages and information for the operator.

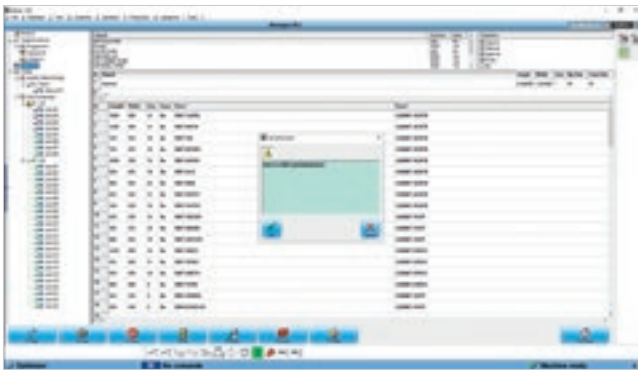




Interactive program for the quick, easy execution of cuts and grooves, even on recycled panels.



An effective diagnosis and troubleshooting program provides complete information (photos and text) to ensure that any problems are quickly resolved.



### Quick Opti

Simple, intuitive software for optimising the cutting patterns directly on the machine.



### Barcode scanner

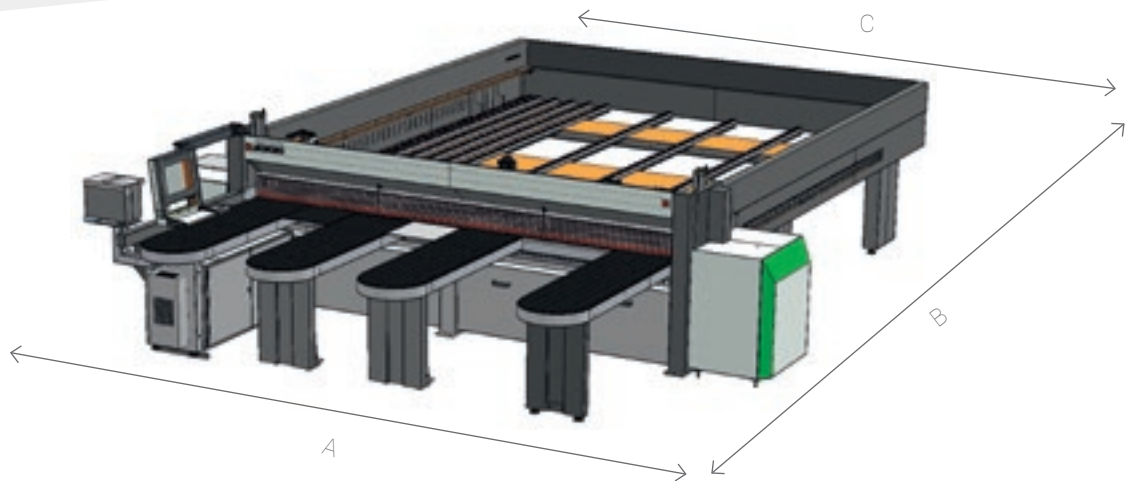
Device for automatically accessing machine operation patterns, for automated management of the remaining reusable cut material.

### Labelling

A special software creates individual labels and prints them in real time, on the machine.



# TECHNICAL SPECIFICATIONS



## SELCO SK 4

	3200X3200	3800X3200	3800X3800	4300X4400
	mm	mm	mm	mm
A	5240	5840	5840	6340
B	6520	6520	7200	7670
C	3640	42340	4240	4740

		450 K1 / 450 K2	470 K1 / 470 K2
Maximum blade protrusion	mm	75	90
Main blade motor	kW	7,5	11
Engraver blade motor	kW	2,2	
Blade carriage transfer		brushless	
Blade carriage speed	m/min	1-120	
Pushing device transfer		brushless	
Pushing device speed	m/min	60	

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 surface noise level A (L<sub>pfA</sub>) dB(A) 83,95. Weighted noise level A (L<sub>wA</sub>) dB(A) 104,95. Uncertainty of measurement K = 4 dB (A).

The measurement was carried out in compliance with UNI EN ISO 3746, UNI EN ISO 11202 and subsequent modifications. The noise levels indicated are output levels and do not necessarily represent safe operational levels. Even though there is a relation between emission levels and exposure levels, this cannot be used reliably to establish whether or not further precautions are necessary. The factors determining the actual noise levels to which the operative personnel are exposed to include the length of exposure, the characteristics of the work environment, other emission sources, i.e. the number of machines and machining operations in the vicinity. In any case, this information will help the machine user to better assess the danger and risks involved.

# THE BIESSE SIZING RANGE

## FLEXIBLE CUTTING



NEXTSTEP



SELCO WN 6 ROS

## SINGLE-LINE BEAM SAWS



SELCO WN 2



SELCO SK 3



SELCO SK 4

## SINGLE-LINE BEAM SAWS



SELCO WN 6



SELCO WN 7

## CUT TO SIZE ANGULAR PLANTS



SELCO WNA 6



SELCO WNA 7



SELCO WNA 8

# SOFTWARE FOR THE SMART, ASSISTED MANAGEMENT OF CUTTING PATTERNS



**OPTIPLANNING IS THE SOFTWARE FOR OPTIMISING CUTTING PATTERNS, DEVELOPED ENTIRELY BY BIESSE. BASED ON THE LIST OF PIECES TO BE PRODUCED AND THE PANELS AVAILABLE, IT CAN CALCULATE THE BEST SOLUTION TO MINIMISE MATERIAL CONSUMPTION, SECTIONING TIMES AND PRODUCTION COSTS.**



- Simple, user-friendly interface.
- Excellent reliability of the calculation algorithms for production batches in small and large companies.
- Automatic import of the cutting list generated by the software for the design of furniture items and/or ERP management systems.

# OPTIPLANNING



# 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.

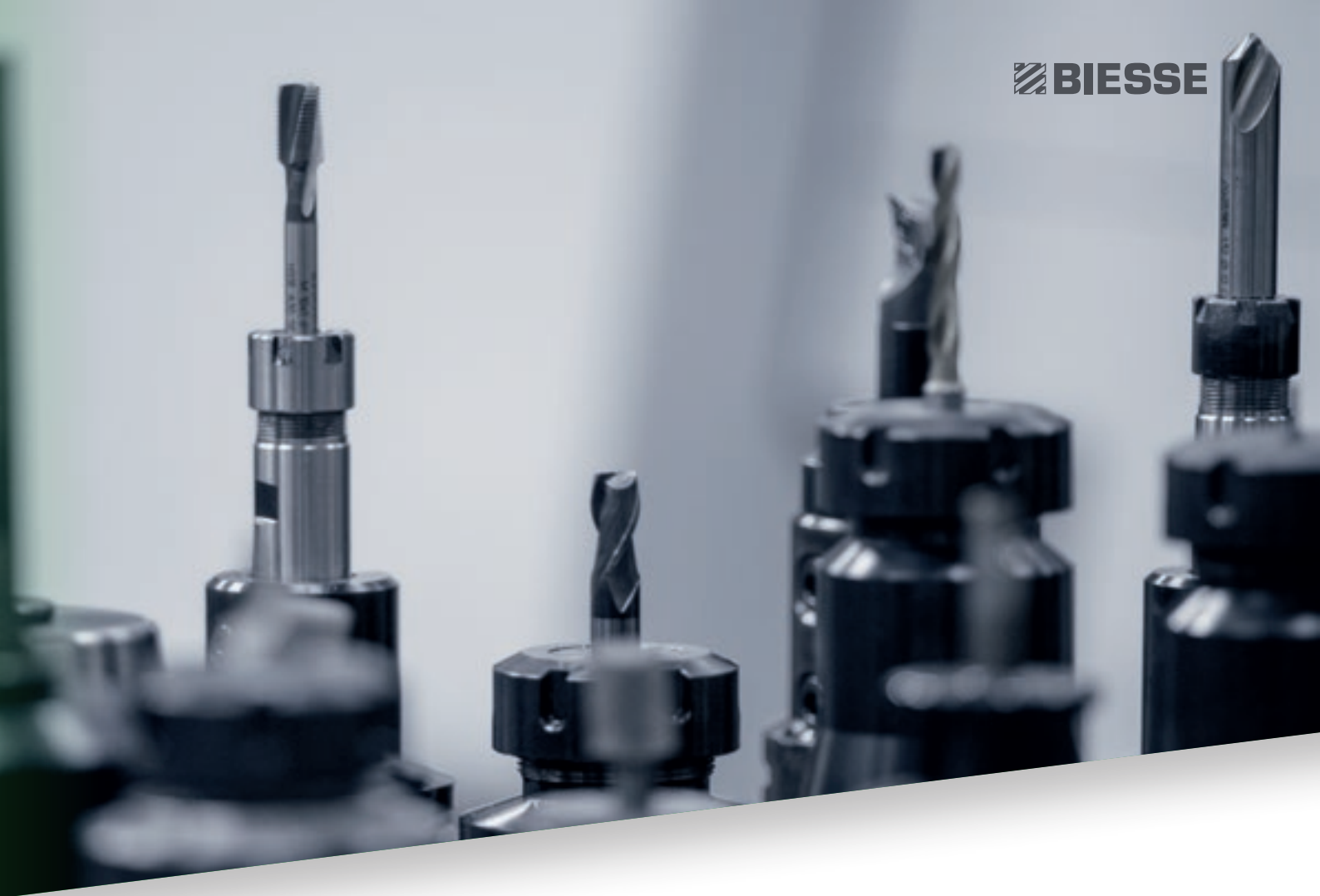
**550**

certified Dealer engineers.

**120**

training courses in a variety of languages every year.



A close-up photograph of several metal drill bits and tool components, arranged in a row. The bits are of different sizes and designs, some with standard double-flute and others with more complex, multi-fluted designs. They are set against a blurred background, highlighting their metallic texture and sharp edges.

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 specialized 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 customized 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 fulfillment time optimized thanks to a global distribution network with de-localized, automated warehouses.

**92%**  
of downtime machine orders fulfilled  
within 24 hours.

**96%**  
of orders delivered in full on time.

**100**  
spare part staff in Italy and worldwide.

**500**  
orders processed every day.

# MADE WITH BIESSE

## BIESSE TECHNOLOGY ACCOMPANIES THE GROWTH OF STECHERT

"On these chairs sits the world" is the motto of the Stechert Group that can effectively be taken literally. What began 60 years ago as a small manufacturing company for pram mouldings, furniture doors and door locks is today one of the largest international suppliers of contract and office chairs, as well as tubular steel furniture. Moreover, since 2011 the company has a partnership with WRK GmbH, an international specialist in podiums, conference room and grandstand seating, associated with Stechert via the joint commercial company STW. For Stechert management, however, the excellent results obtained are no excuse for resting on their laurels. On the contrary, the company is investing heavily in the Trautskirchen site to make its production even more efficient and profitable. In the search for a new machinery partner, the company's management chose the Italian manufacturer Biesse. "For the project we chose machines that already had certain options and were predisposed for automation", said Roland Palm, Biesse Area Manager. An efficient production cycle was created in which workers are able to perform at their best after only a short training period.

At the start of the production line is the panel saw "WNT 710" with one cutting line. "Because", explained skilled cabinet maker Martin Rauscher, "we want to be able to work panels of up to 5.90 metres in order to reduce waste as much as possible." Normal rectangular panels for tables or wall panels are taken directly to the "Stream" edgebander with "AirForceSystem" technology. The Biesse edgebander has a group that activates the laminated edging material no longer via a laser beam but using hot air to obtain the so-called "zero gap". "The quality is just as good as the laser system, if not even better: with a connection power of 7.5 kW, the cost per square metre is much lower", underlined the Biesse Area Manager.

"We want to be ready for when we mould the frame ourselves and we must therefore calibrate the panels" said Martin Rauscher, "The same is true of course for solid wood and multiplex panels, which require grinding before being painted in an external company. For both types of work a Biesse "S1" sander is used. In order to meet the needs of the future, in the Trautskirchen plant there are also two Biesse numerically controlled machining

centres: a "Rover C 965 Edge" and a "Rover A 1332 R", which are perfectly complementary. The Stechert Group also intends to strengthen sales of innovative solutions for interior fittings, with complete systems for walls, ceilings, floors and mezzanines. For panel sectioning, the Group has purchased a "Sektor 470". For other geometry, groove and spring machining as well as boring and surface milling, there are two Biesse machining centres, an "Arrow" for nesting applications, a "Rover B 440" and more recently a 5-axis machine, the "Rover C 940 R" machining centre in order to be able to produce, in particular, wall and ceiling panels machined in 3 dimensions.

Source: HK 2/2014

# LIVE THE EXPERIENCE



Interconnected technologies and advanced services that maximise efficiency and productivity, generating new skills to serve better our customer.

**LIVE THE BIESSE GROUP  
EXPERIENCE AT OUR CAMPUSES  
ACROSS THE WORLD.**

