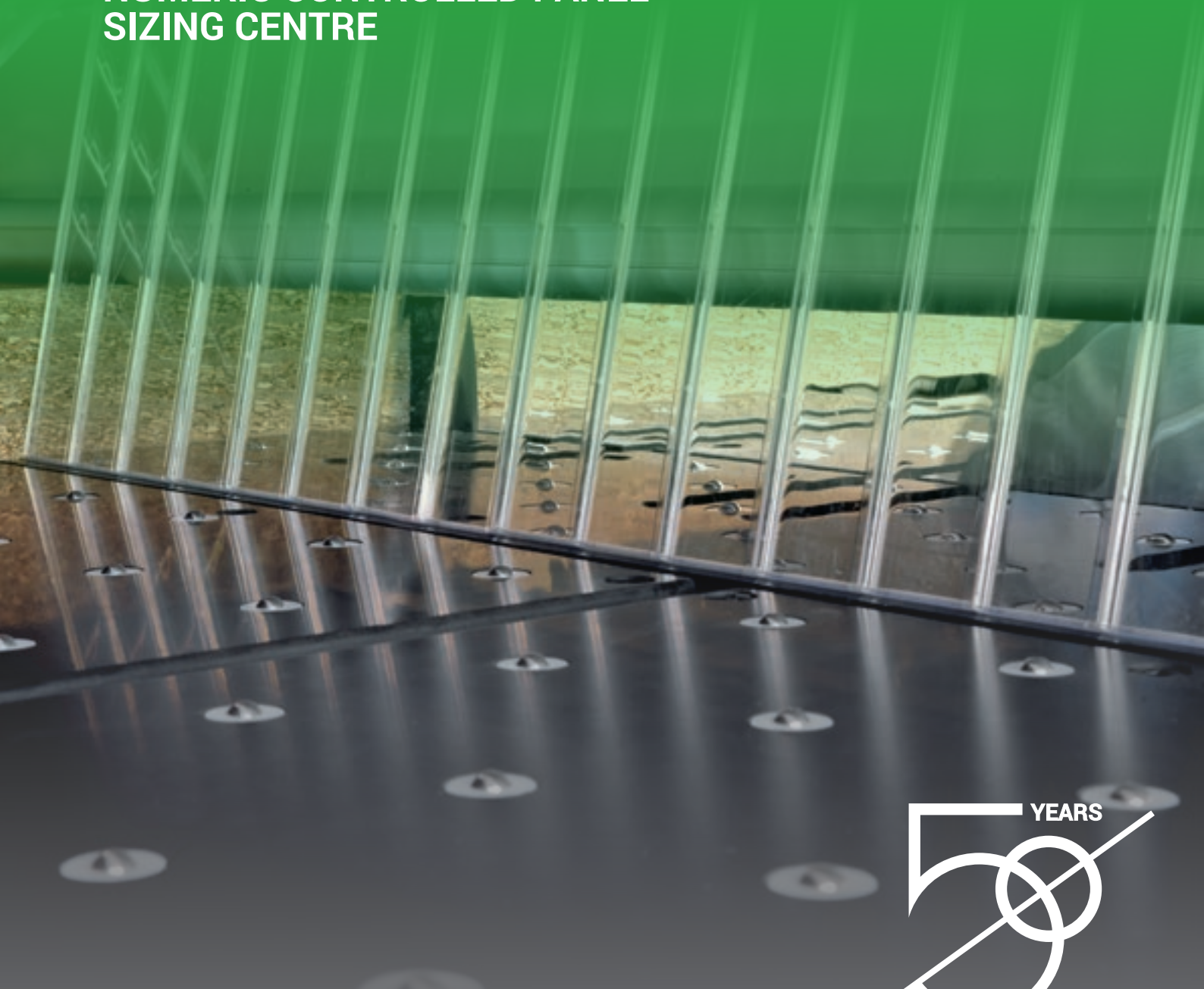


SEL CO WN 6

NUMERIC CONTROLLED PANEL
SIZING CENTRE



 **BIESSE**



 **BIESSEGROUP**

THE RESULT OF TECHNOLOGICAL RESEARCH FOR TOP CLASS PERFORMANCE



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 highly creative designers.

BIESSE RESPONDS

with **technological solutions** that underline and support technical expertise as well as process and material knowledge. **SELCO WN 6** is the result of a project developed with the latest technologies, adopting revolutionary technical solutions that increase yield and overall machining quality. SELCO WN 6 is a professional range of beamsaws with one cutting line, designed to produce medium-sized batches.



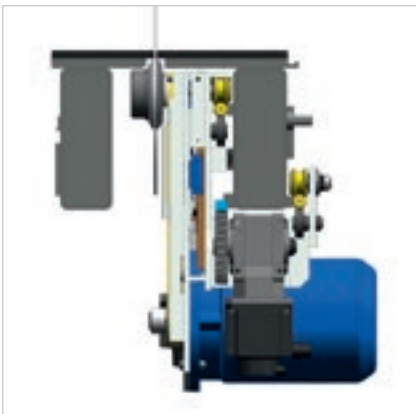
SELCO WN 6

- ✓ HIGH QUALITY AND CUTTING ACCURACY
- ✓ REDUCED TOOL CHANGEOVER TIME
- ✓ PRODUCTION INCREASE OF UP TO 40%
- ✓ TECHNOLOGICAL SOLUTIONS FOR EVERY MACHINING NEED.

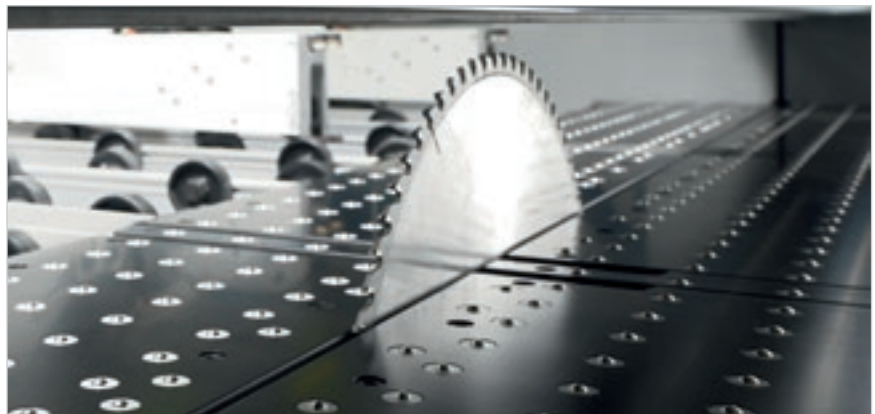
CUTTING QUALITY



Perfect stability, thanks to the solid steel structure of the base sustained by robust supports. The slide guides of the blade-holder carriage are located on the same beam to ensure they are straight and perfectly parallel.



The excellent balancing of the tool-holder carriage (thanks to the shape of the base and the positioning of the guides and wheels) means there are no blade vibrations at all, and the carriage makes an extremely linear movement.



Top 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.



The protrusion of the main blade, and the opening of the presser, are automatically adjusted by the numerical control on the basis of the thickness of the book to be cut, thereby obtaining the best cutting quality in all working conditions.





Vertical movement of the main blade is managed and optimized via quick blade height adjustment.



The **anti-slide device** controls the position and the number of rotations of the blade, intervening to adjust the advance speed. Maximum cutting quality, a longer blade lifespan, and reduced maintenance costs.



The consistent, controlled pressure on the book of panels to be cut is guaranteed by the **presser** with its single-element structure.



Cutting line closure system, to prevent the longitudinal trim cuts from falling into the machine and fouling the blade path.

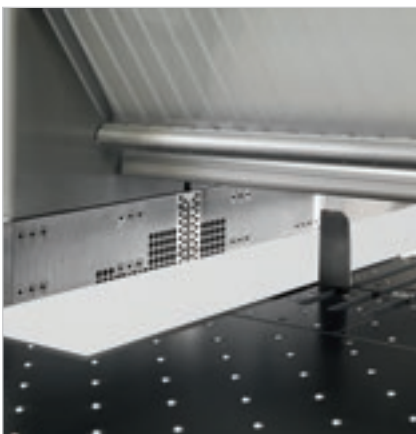
CUTTING ACCURACY



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.



Independent and self-levelling grippers, ensure the book is firmly secured. The design of the system completely ejects the cut panels making it easier for the operator to handle both the panels and waste.

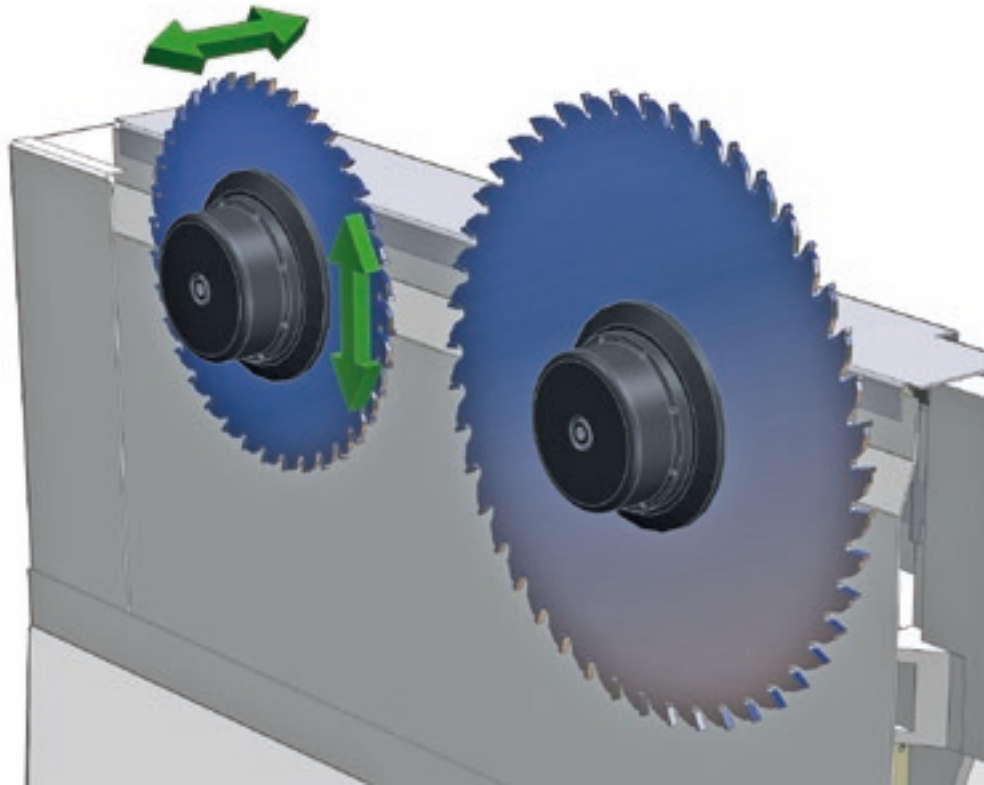


Perfect alignment of very thin and/or flexible panels too, minimising cycle times thanks to the **side alignment** stop integrated in the blade carriage.



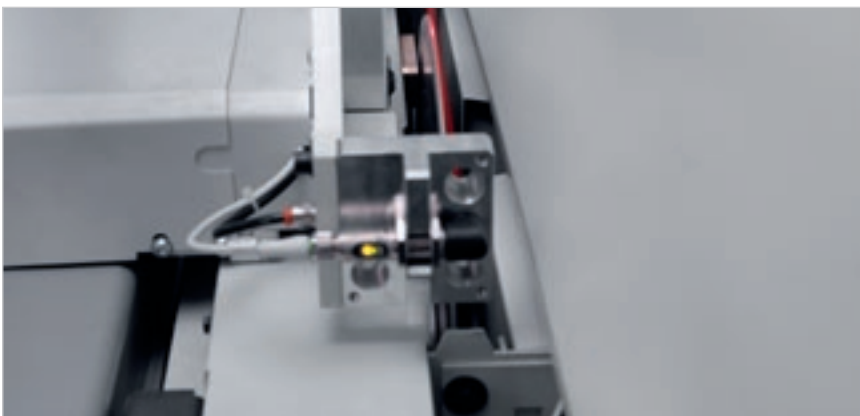
Powerful front aligners align the book of panels against the pushing device collets.

REDUCED TOOL CHANGEOVER TIME



Quick Change system (patented) for the quick release of the blades without 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.



Automatic alignment.

The patented system automatically aligns the scoring blade in seconds, which completely eliminates test cuts, reduces set-up time which increases efficiency and reduces production costs.

REDUCED PANEL LOADING TIMES

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



The lift table consists of a strong frame is equipped with a special structure to load the pack of panels directly by forklift.



Infeed conveyors with free-running or powered rollers allow the loading and side or rear unloading of the panels.



Double-level infeed conveyor. Thanks to the reduced footprint, which utilises height, the double-level infeed conveyor enables the optimisation of space and is perfectly suited to production sites that cannot accommodate two conveyors side by side.



The rotating station (patented) rotates the book of panels, maintaining the alignment with the point of reference both before and after the rotation.



Panel clamping devices avoid the misalignment of the stack during the rotation phase.



Front aligners to align the boards in the width directly on the turn station unit .

COMPACT, INTEGRATED LOADING SOLUTIONS

Maximum protection of the surface of delicate panels to prevent damage.

The **X Feeder** autoloader loads the panels to be cut into the machine in a fully automated manner, thanks to a suction arm system.

A compact, ergonomic solution that can easily adapt to any manufacturing context, occupying a reduced footprint and optimising the production flow.

The operator has one or more stacks of material always available, with the possibility of selecting which one to load from. It can be configured with 2 or 3 arms, depending on material characteristics.

It adapts automatically to different panel formats, thanks to the automatic positioning of suction cups depending on panel size.



INCREASE OF MANUFACTURING CAPABILITY

Increase of manufacturing capability for efficient, customised production.

The seamless integration with the Twin Pusher system allows loading the panels whilst the machine is running: the new stack is created whilst the auxiliary pushing device processes the last strip.

Extremely user-friendly and intuitive operation thanks to the single controlpoint management via supervisor-free machine control.

02

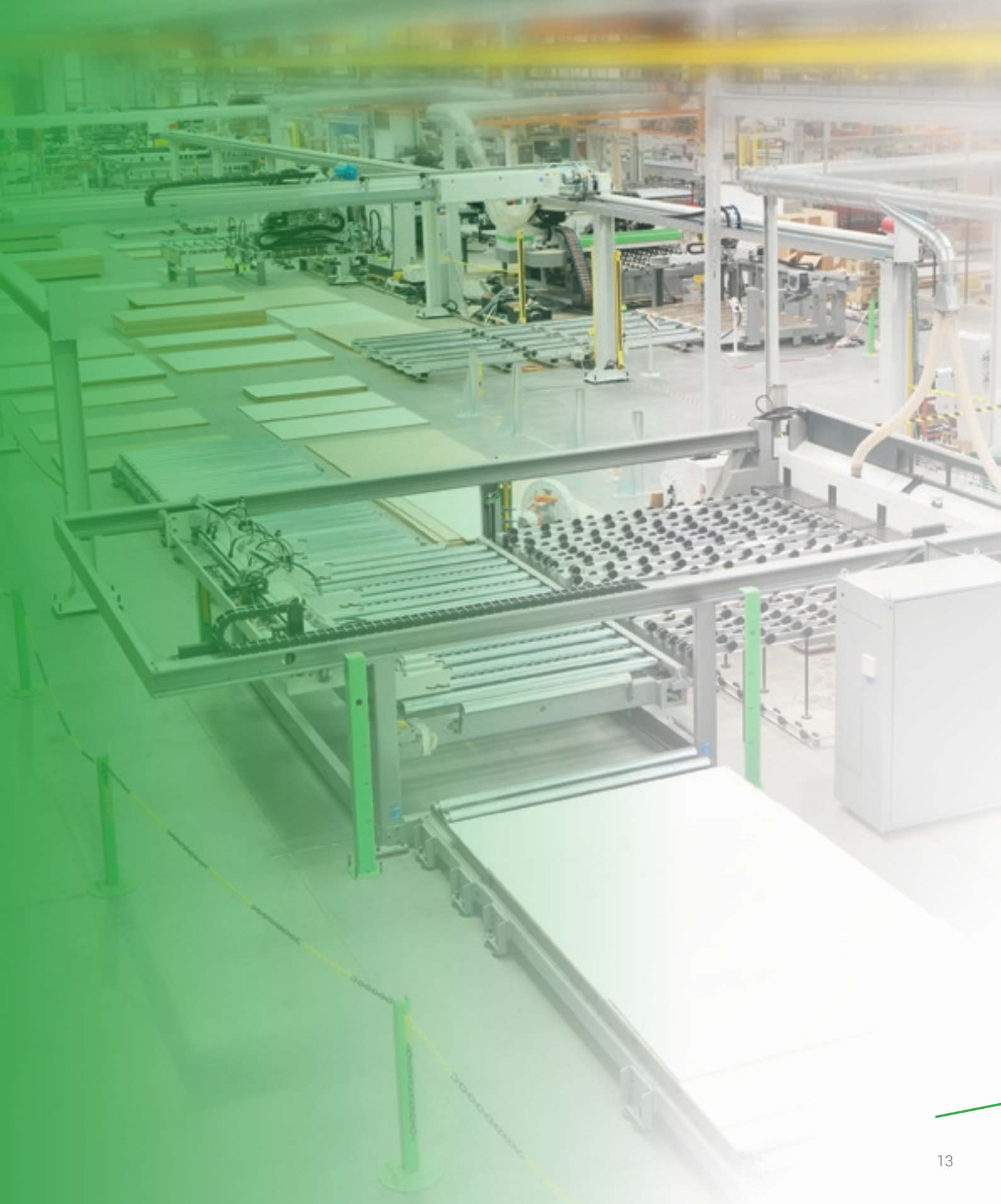


PRODUCTION

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.



LABELLING WITH MAXIMUM EFFICIENCY

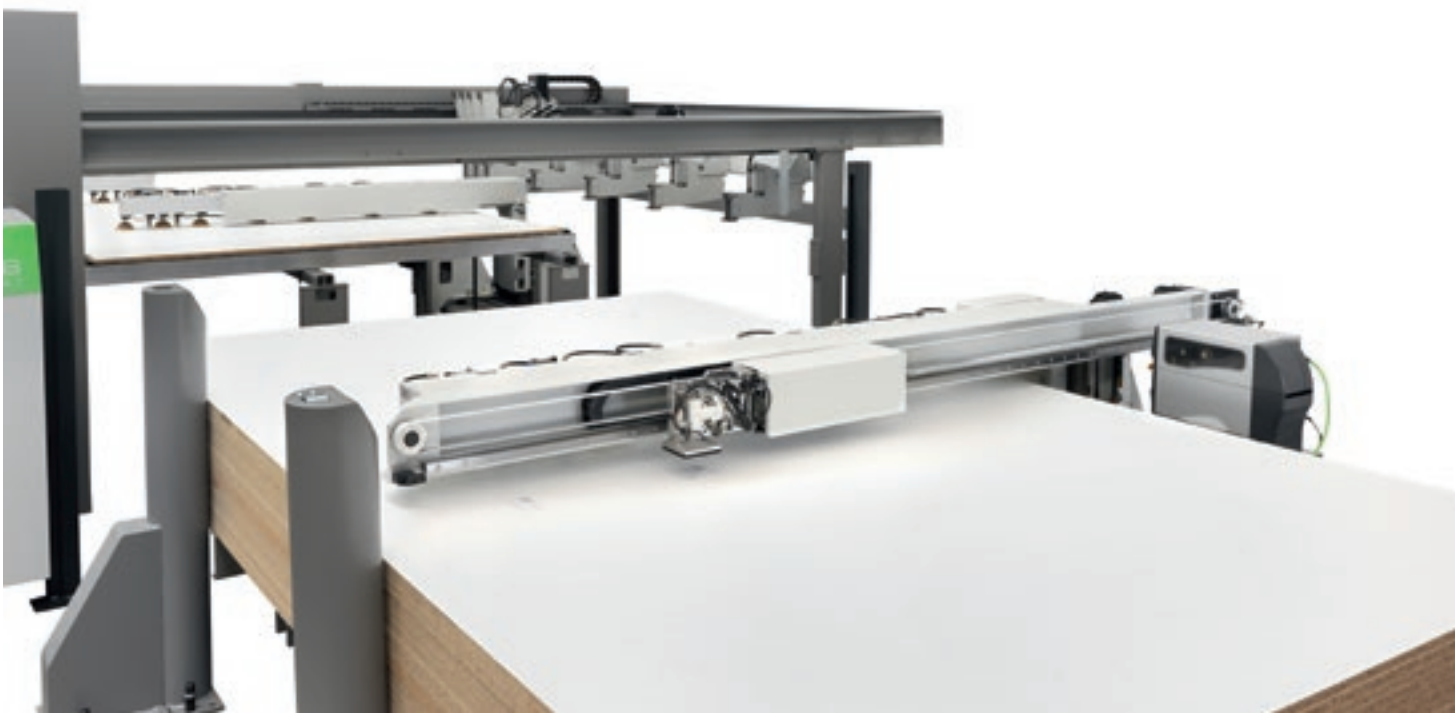
The X Feeder L Loader supports automatic labelling of single or stacked panels before loading into the machine.



Automatic detection of the panel in the loading position for correct, precise labelling.



The rotating application head (0-90°) can follow the orientation of the component.

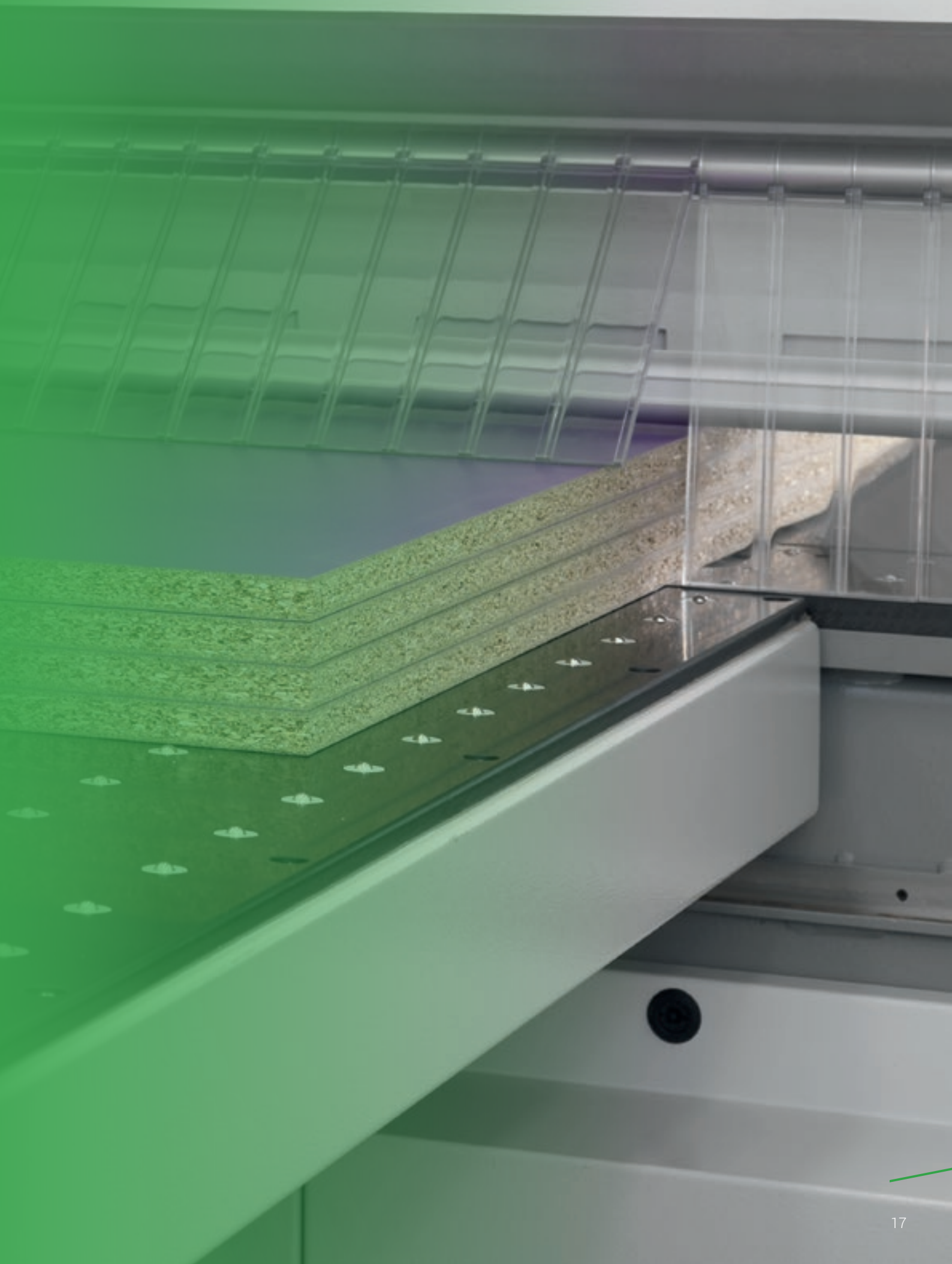


TWIN PUSH ER

TWO BEAM SAWS IN ONE

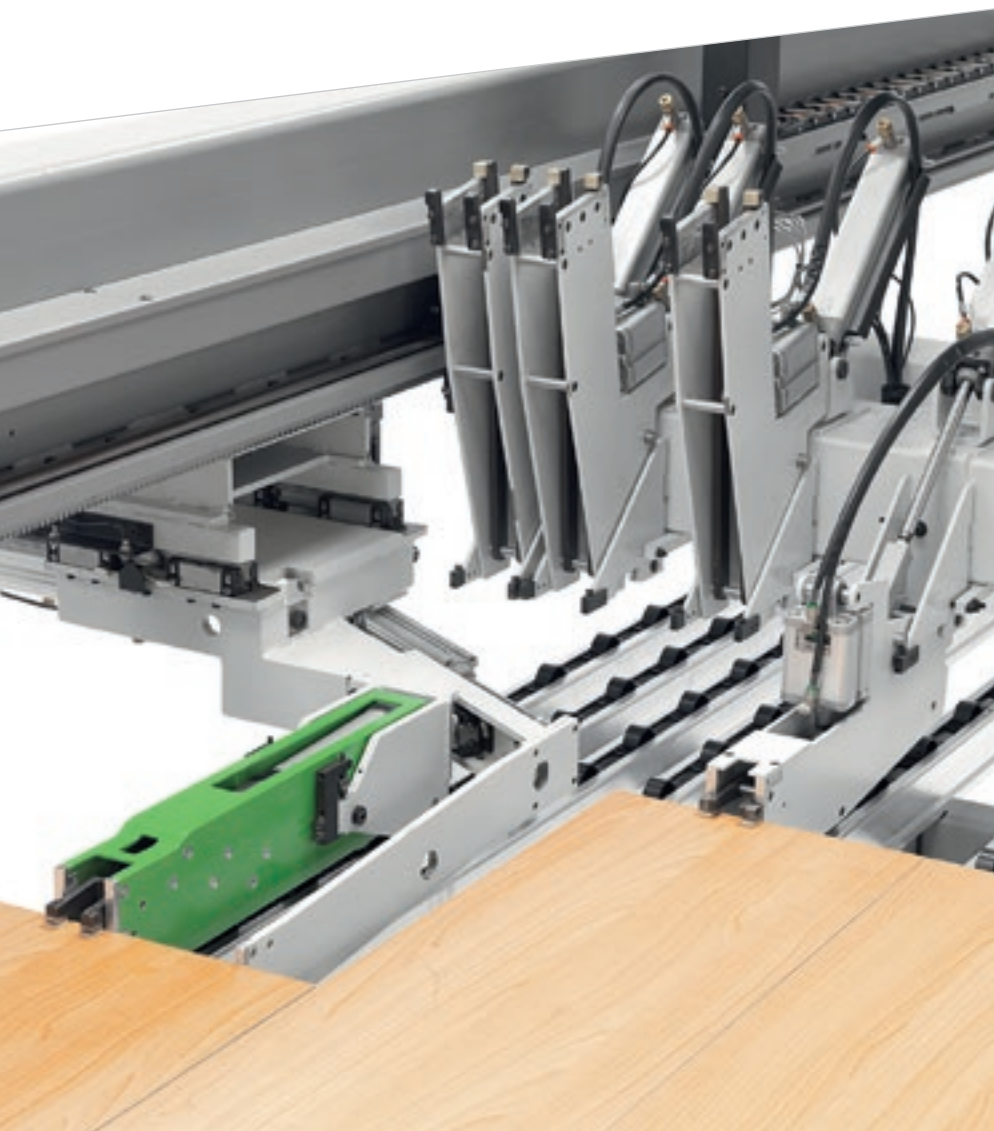
The Twin Pusher, an exclusive patent for all Biesse beam saws, consists of two complementary pushing devices. An additional stop allows independent cutting of strips of up to 650 mm wide.

Increased productivity by up to 40%, optimum management of production efficiencies and a ROI within the first year.



PRODUCTIVITY INCREASE OF UP TO 40%

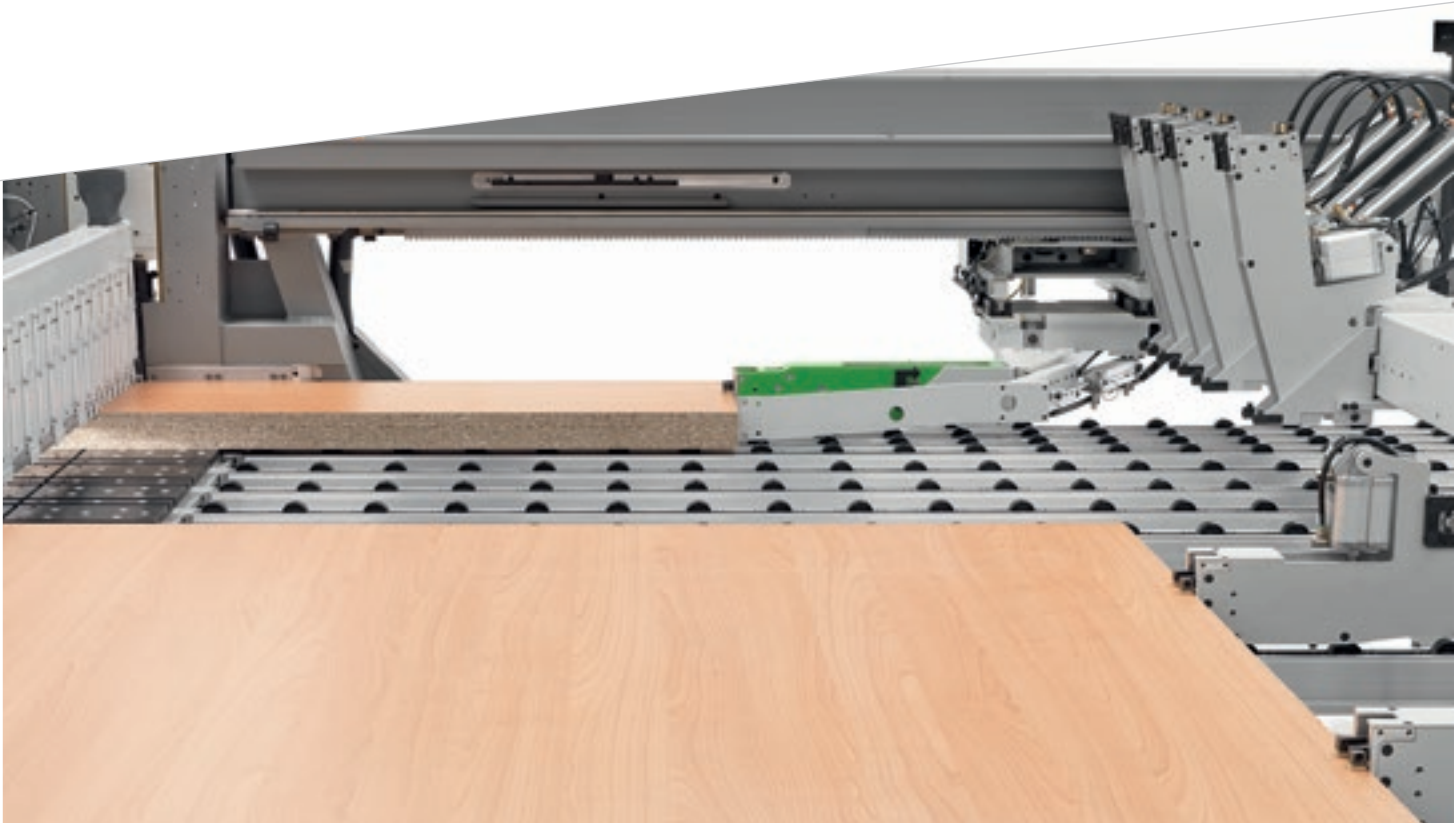
Two independent cutting stations
on a single beamsaw.



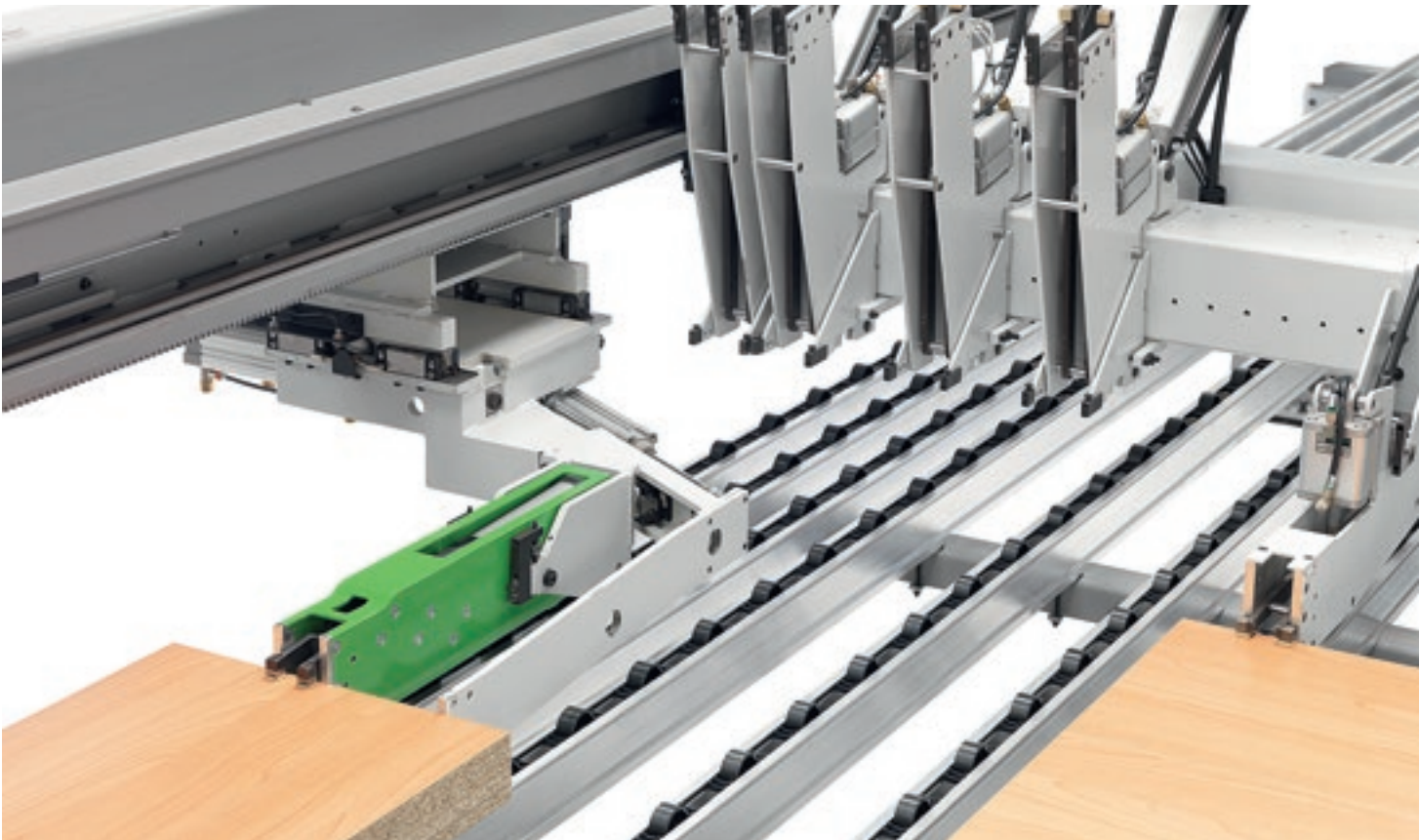
An auxiliary pushing device consisting of a collet with side positioning by means of the numerical control. An additional stop allows independent cutting of strips of up to 650 mm wide.



Differentiated cross cut, also for narrow strips.

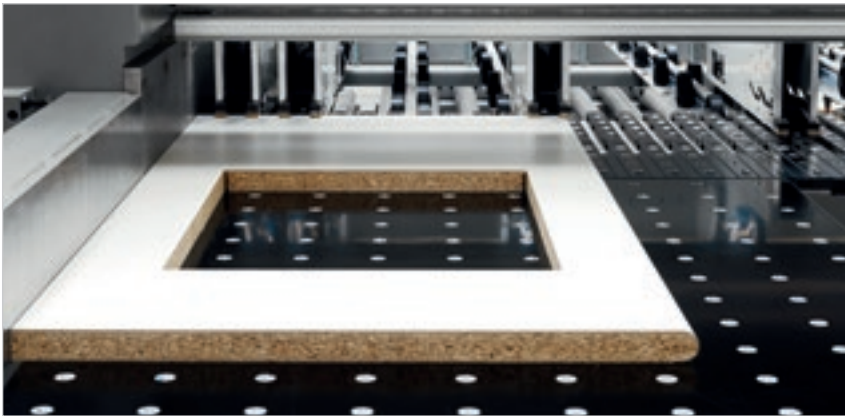


Rip and cross-cuts are performed at the same time.

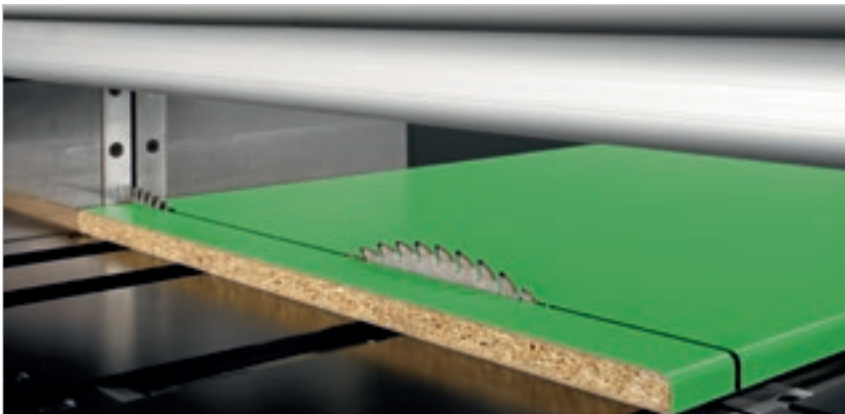


Cross-cut of the last strip, with advanced loading and rotation of the next book of panels.

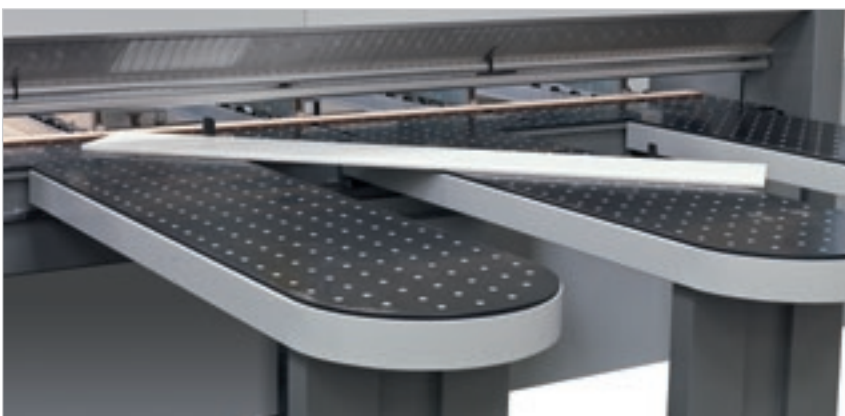
TECHNOLOGICAL SOLUTIONS FOR EVERY MACHINING NEED



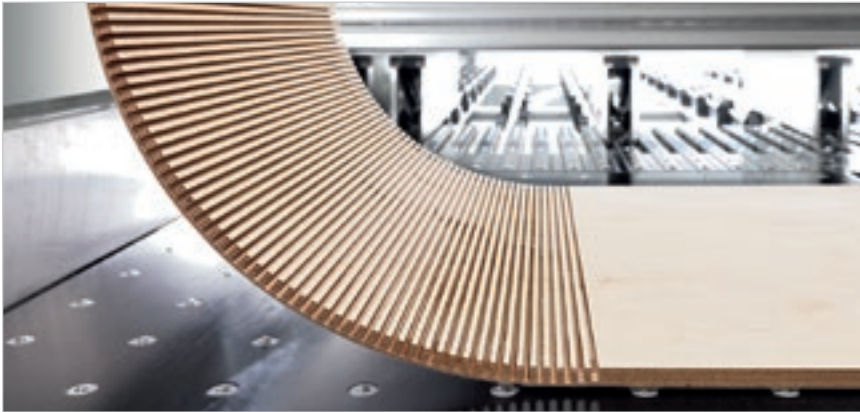
Software for making window cuts on panels. The layouts can be stored on the numerical control.



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.



System for the automatic execution of grooves, whose width 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, or via an electronic device.



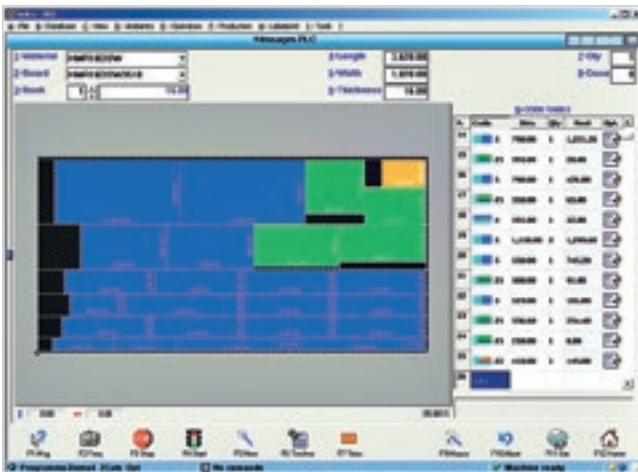
Collets with specific stops for processing books of laminated materials with protruding edges.



Thin panels can be loaded from the lifting table, using independent floating pushing points that are electronically controlled. A specific logic together with the front pop-up stops prevent the risk of mis-feeding (by means of attrition) those panels that don't belong to the book being fed.

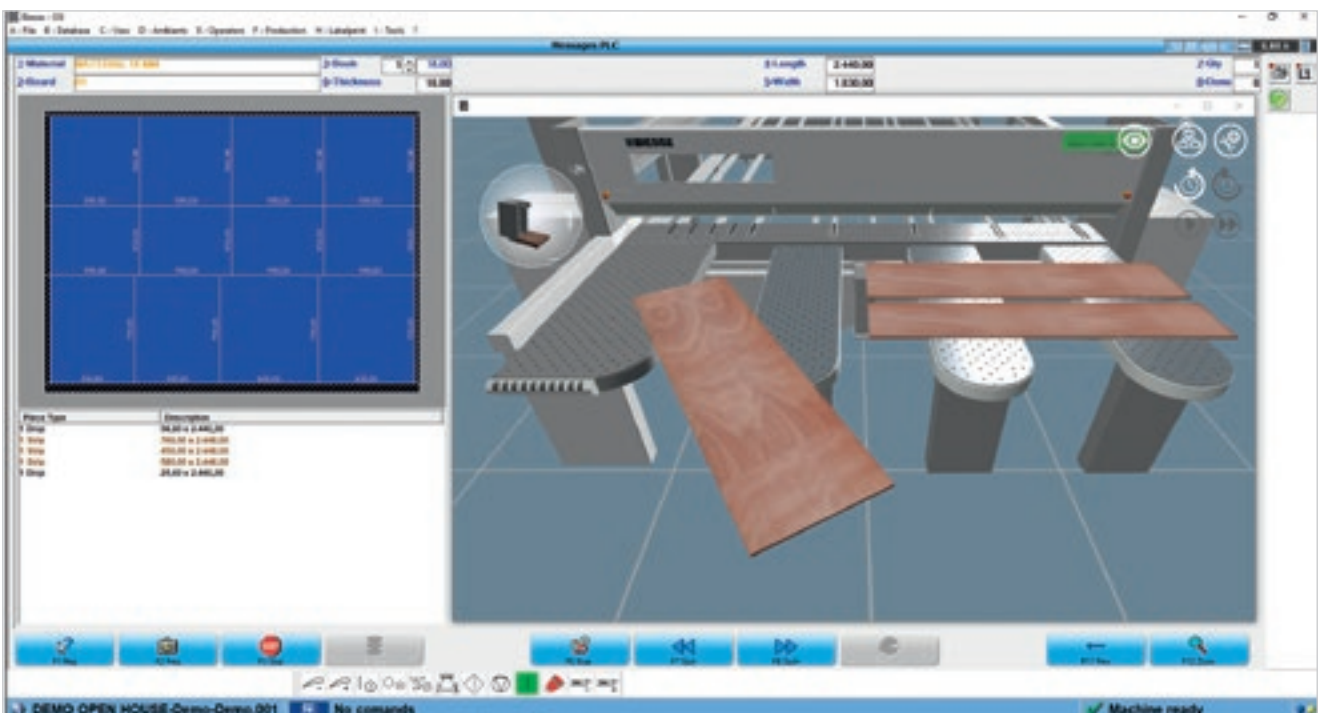
EASY TO USE, WITH OPTIMISED MACHINING OPERATIONS

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.



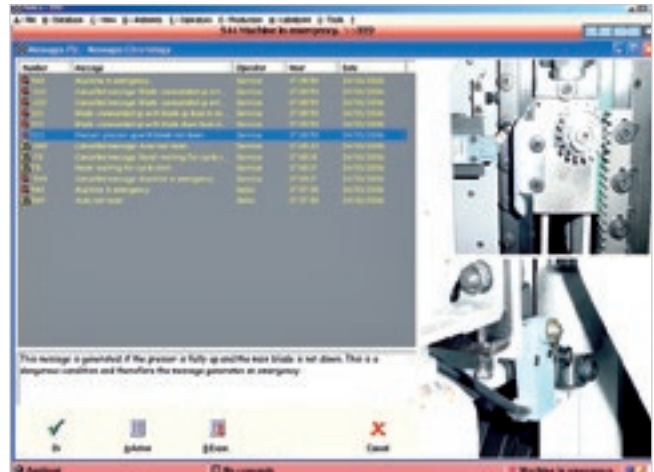
Easy cutting pattern programming.

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

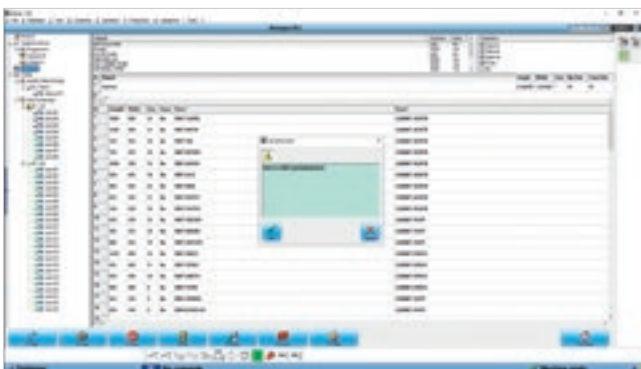




Interactive program for the quick, easy execution of cuts and grooves, even on recycled panels.



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.*

Labelling.
A special software creates individual labels and prints them in real time, on the machine. The information available can also be printed in bar code form.



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.



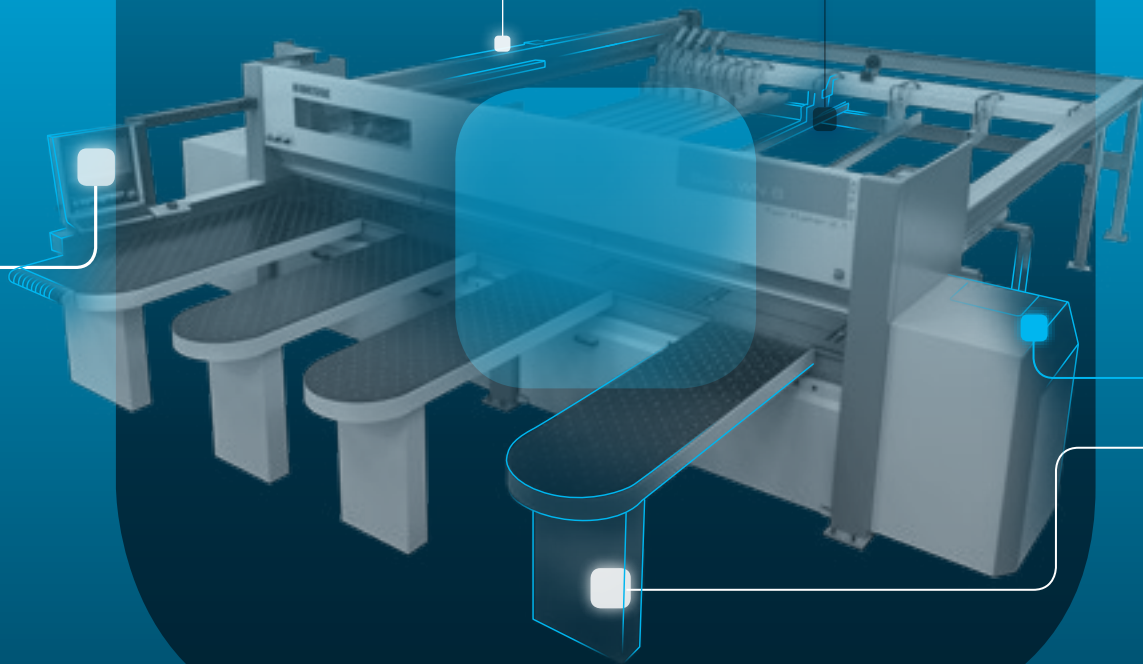
- Simple, user-friendly interface.
- Excellent reliability of the calculation algorithms for production batches in small and large companies.
- Automatic import of the cutting list generated by the software for the design of furniture items and/or ERP management systems.

OPTIPLANNING



SOPHIA

GREATER VALUE FROM MACHINES



SOPHIA is the IoT platform created by Biesse in collaboration with Accenture which enables its customers to access a wide range of services to streamline and rationalise their work management processes.

It allows alerts and indicators to be sent to the customer in real time, in relation to production, the machines used and the type of process carried out. These are detailed instructions for more efficient use of the machine.

□ **10% CUT IN COSTS**

□ **50% REDUCTION
IN MACHINE DOWNTIME**

□ **10% INCREASE
IN PRODUCTIVITY**

□ **80% REDUCTION IN PROBLEM
DIAGNOSTICS TIME**

**SOPHIA TAKES THE INTERACTION BETWEEN
CUSTOMER AND SERVICE TO A HIGHER LEVEL.**

iOT
SOPHIA

IoT - SOPHIA provides a comprehensive overview of the specific machine performance features, with remote diagnostics, machine stoppage analysis and fault prevention. The service includes a continuous connection with the control centre, the option of calling for assistance from within the customer app (such calls are managed as priorities), and an inspection visit for diagnostic and performance testing within the warranty period. Through SOPHIA, the customer receives priority technical assistance.

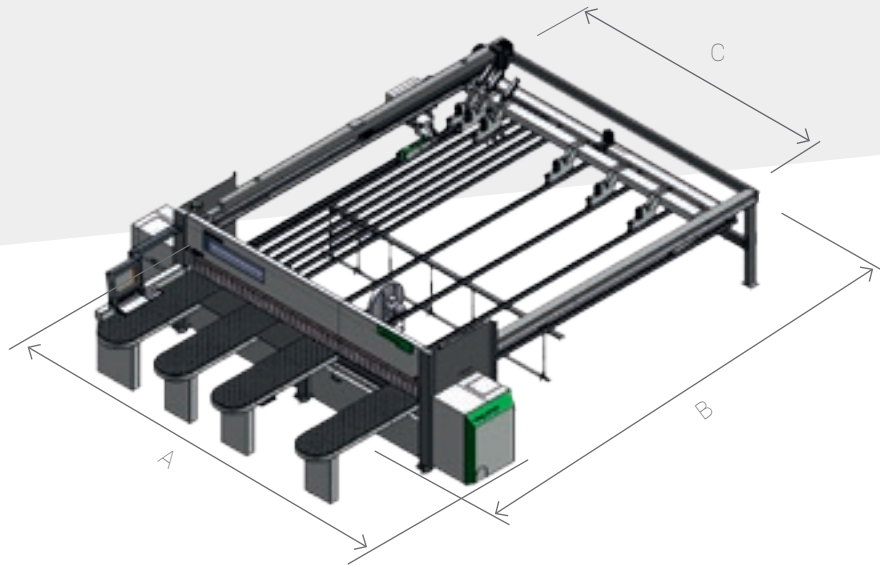
PARTS
SOPHIA

PARTS SOPHIA is the easy new, user-friendly and personalised tool for ordering Biesse spare parts. The portal offers customers, dealers and branches the chance to navigate within a personalised account, consult the constantly updated documentation of the machines purchased, and create a spare parts purchase basket indicating the real time availability in the warehouse and the relative price list. In addition, the progress of the order can be monitored at all times.

 **BIESSE**

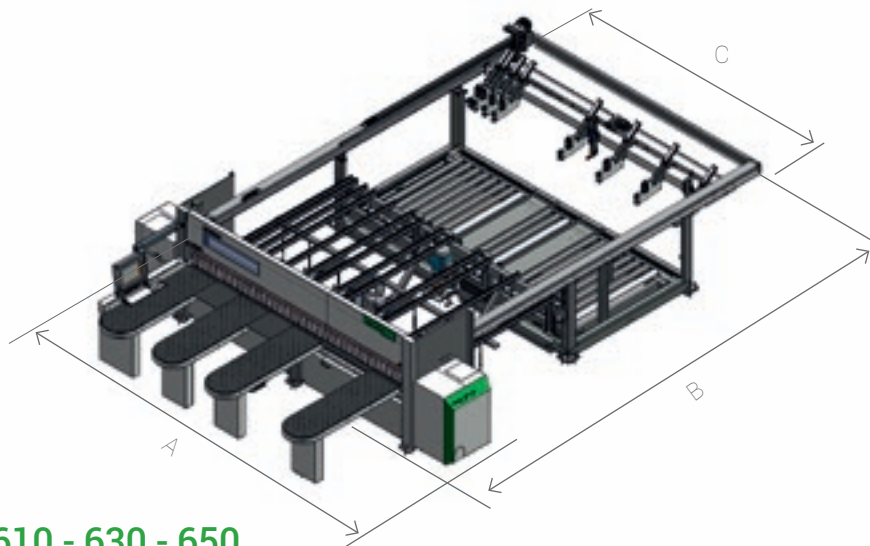
in collaboration with  **accenture**

TECHNICAL SPECIFICATIONS



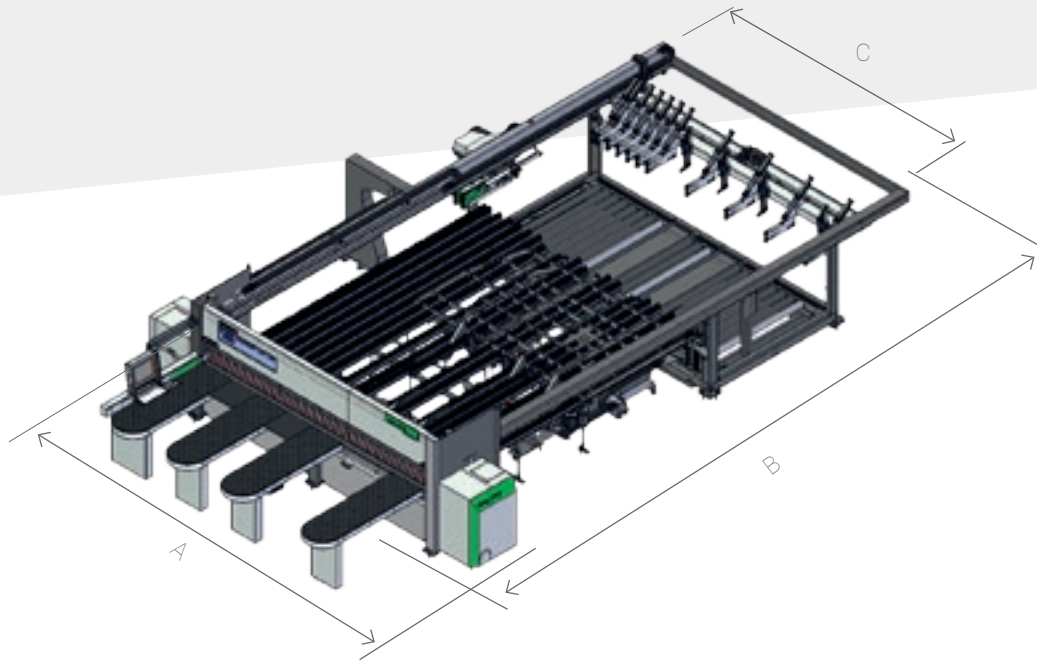
SELCO WN 610 - 630 - 650

	3200X3200	3800X3200	3800X3800	4500X4500
	mm/inch	mm/inch	mm/inch	mm/inch
A	5350/210.6	5950/234.3	5950/234.3	6650/261.8
B	6980/274.8	6980/274.8	7580/298.4	8280/326
C	3630/142.9	4230/166.5	4230/166.5	4930/194.1



SELCO WNT 610 - 630 - 650

	3200X2200	3800X2200	4500X2200
	mm/inch	mm/inch	mm/inch
A	5350/210.6	5950/234.3	6650/261.8
B	9240/363.8	9240/363.8	9240/363.8
C	3630/142.9	4230/166.5	4930/194.1



SELCO WNTR 610 - 630 - 650

	3800X2200	4500X2200
	mm/inch	mm/inch
A	5950/234.3	6650/261.8
B	9950/391.7	11490/452.4
C	4230/166.5	4930/194.1

		610	630	650
Maximum blade protrusion	mm/inch	95/3.7	108/4.3	123/4.8
Main blade motor	kW	15,0	18,5	
Engraver blade motor	kW	2,2		
Blade carriage transfer		brushless		
Blade carriage speed	m/min -ft/min	1-160/0,04-6,3		
Pushing device transfer		brushless		
Pushing device speed	m/min -ft/min	90/295.2		

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 (L_{pfA}) during machining for operator workstation 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 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.

SERV ICE & 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

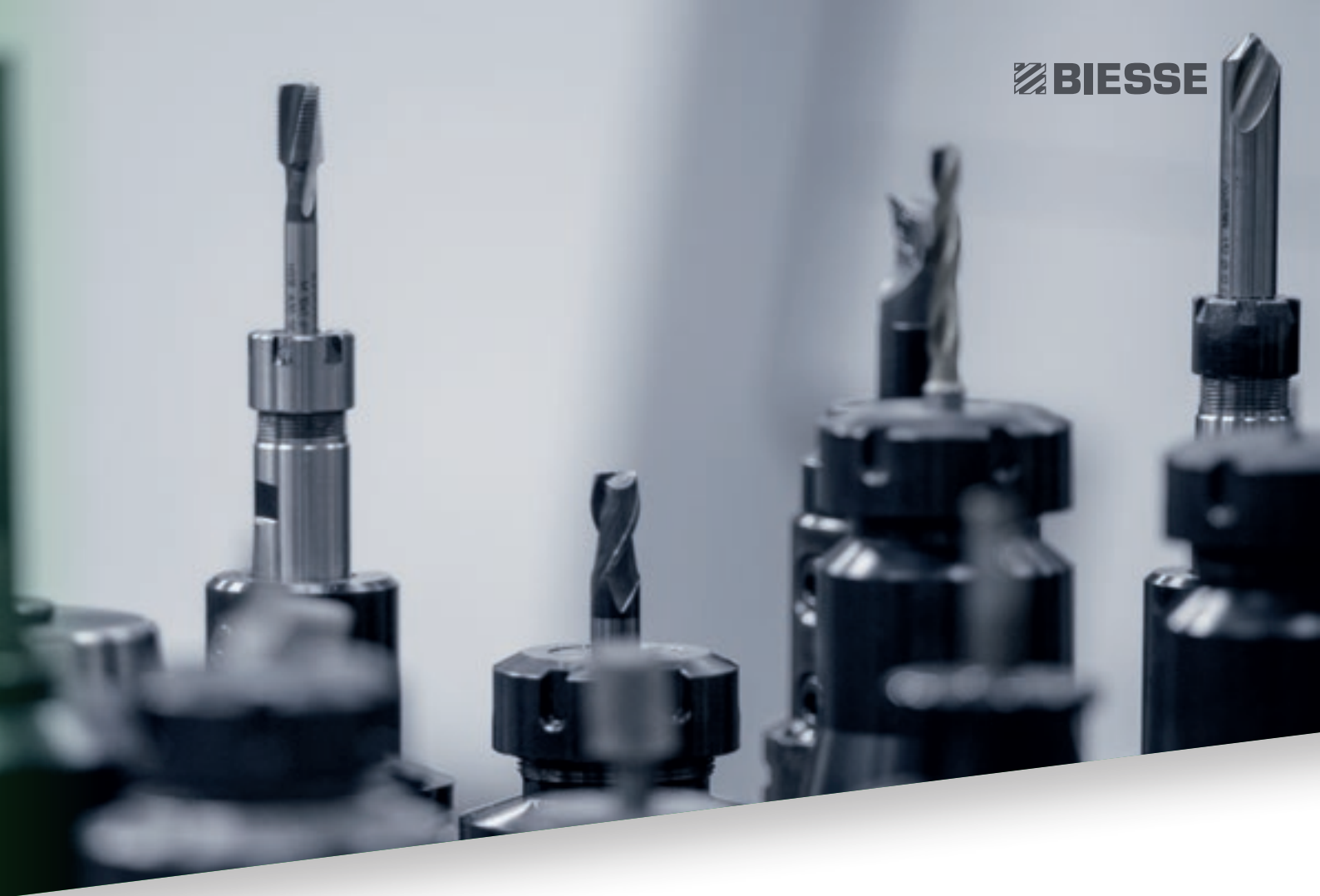
Biesse engineers manning a Teleservice Centre.

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 focus is on the sharp, metallic tips of the bits, with some blurred in the background. The lighting is dramatic, highlighting the textures and metallic sheen of the tools.

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 cutting, 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

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

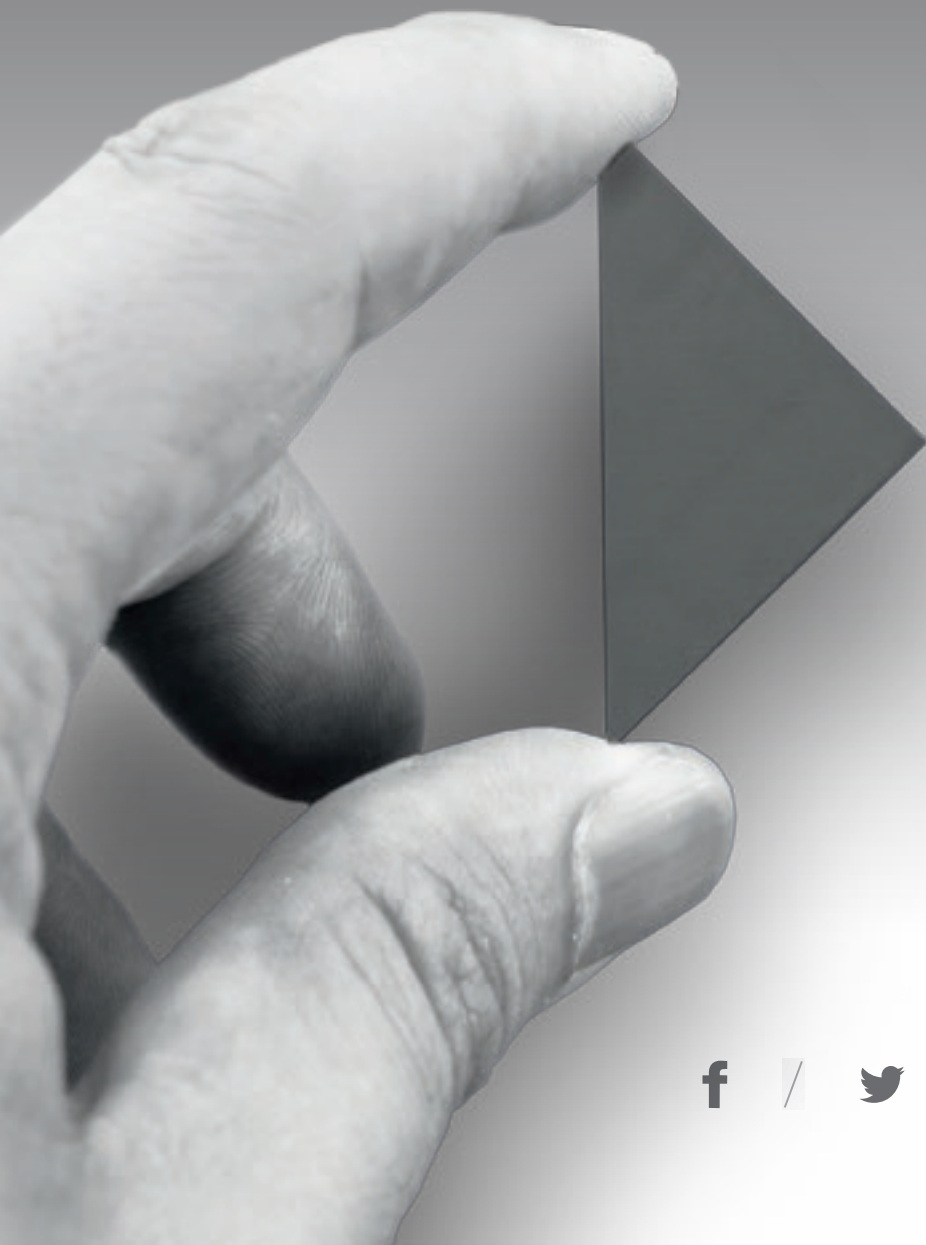


SELCO WNA 7



SELCO WNA 8

LIVE THE EXPERIENC



BIESSEGROUP.COM

E



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.

 **BIESSEGROUP**

