

### NUMERICAL CONTROL BEAM SAWS



### THE RESULT OF TECHNOLOGICAL RESEARCH FOR TOP CLASS PERFORMANCE

### THE MARKET EXPECTS

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

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



WATCH THE VIDEO

### **CUTTING QUALITY**



 $\swarrow$ 

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.

 $\swarrow$ 

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.





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.

### SELCO WN 6

### 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.



 $\checkmark$ 

 $\swarrow$ 

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 .



### 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.



### 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.



### LABELLING WITH MAXIMUM EFFICIENCY

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



SELCO WN 6

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.



### **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.

### SELCO WN 6



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.



#### $\swarrow$

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



B\_OPTI 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.



### B\_OPTI





# **IRACKING**

### SOLUTION FOR THE SIMPLE, ERGONOMIC AND EFFICIENT USE OF THE MACHINE.



Tracking Light is the technological solution, with a band of dynamic LEDs on the cutting line, developed by Biesse to help the operator in the various work phases. The LEDs assume different colours to indicate the various steps of the task, acting as a guide and making the use of the machine simple and intuitive. The operator can monitor the machine status safely at any time, without checking the simulation on the monitor and avoiding any risk of error.



#### WHITE LEDs

The flashing white LEDs indicate the phase of panel loading on the machine, and the width of the piece to be loaded.

#### **BLUE LEDs**

The blue LEDs indicate that the panel is being machine, and that the outfeed parts need further processing. TRACKING LIGHT HELPS THE OPERATOR DURING MANUAL TASKS, ACTING AS A GUIDE THROUGHOUT THE PROCESS

- No risk of mistakes
- Optimised management of the task
- Smooth, efficient cutting cycles
- User friendly
- Practical design

#### DEVICE DESIGNED TO MAKE YOUR TECHNOLOGIES EVEN SMARTER.

#### DYNAMIC LED INDICATORS

The moving white LEDs indicate the manual piece rotation direction, whereas the LEDs with a brighter light correspond to the exact width of the piece to be loaded.



#### **GREEN LEDs**

The green LEDs indicate that the cutting phase has been completed and the outfeed panel does not need any further processing.



### **TECHNICAL SPECIFICATIONS**



#### **SELCO WN6**

	32x32	38x32	38x38	38x45	38x65	45x45	45x65	45x78	59x57	59x91
	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch	mm/inch
А	5350/211	5950/234	5950/234	5950/234	5950/234	6650/262	6650/262	6650/262	8050/317	8050/317
В	6980/275	6980/275	7580/298	8280/325	10280/405	8280/326	10300/405	11600/457	9500/374	12900/508
С	3630/143	4230/166	4230/166	3630/142	3630/143	4930/194	4950/195	4950/195	6350/250	6350/250



#### **SELCO WNT6**

	32x22	38x22	45x22	59x22
	mm/inch	mm/inch	mm/inch	mm/inch
Α	5350/211	5950/234	6650/262	8050/317
В	9240/364	9240/364	9240/364	10220/402
С	3630/143	4230/166	4930/194	6350/250



#### **SELCO WNTR6**

	38x22	45x22	59x22
	mm/inch	mm/inch	mm/inch
Α	5950/234	6650/262	8050/317
В	9950/392	11490/452	12820/505
С	4230/166	4930/194	6350/250

		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.

Equivalent sound pressure level in position in the work area during machining (LpA) dB(A) 82,76. Environmental correction factor (K) dB(A) 5,35. Sound power level during machining (LwA) dB(A) 106,14. Weighted peak instantaneous sound pressure in the work area during machining dB(C) < 130. 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.

### 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**









The Biesse IoT platform which enables customers to access an extensive range of services to streamline and rationalise their work management processes.

○ SERVICES ○ PROACTIVITY ○ ANALYSIS





# MATCH WITH

Biesse is the ideal partner throughout the entire production process. Courtesy of a complete range of cutting-edge products combined with the ongoing development of latest-generation technologies, Biesse is ready to respond to even the most complex requirements of companies within the sector.

We are on hand to recommend the ideal technologies to support your business, for efficient and competitive production: machining centres, panel saws, edgebanding machines, vertical and horizontal boring machines, sanders and handling and assembly solutions.



Skipper 100 is the innovative numerical control processing centre that can process panels of different formats in sequence and in "real time". It's ideal for the non-standard production of large companies where personalisation becomes the norm, for producing small batches for third parties, and for those requiring just-in-time flexible production.



Stream A SMART is the new range of automatic single-sided edgebanding machines, designed for artisan producers and small companies looking for ease of use and customised production.

# MADE WITH BIESSE

### LE BOONE INTERNATIONAL TOP PRODUCTION WITH INTEGRATION AND AUTOMATION

Le Boone International was founded in 1950 by Jan Van Hecke, and has since become a worldwide point of reference in the furnishing sector.

Over the last thirty years, the company has specialised in the design and production of furniture items that optimise the space in the rooms where they're used, from the home to the workplace.

Despite its growth within the market, the company has maintained its production site in Poperinge, Belgium.

"Our market includes various target groups, from people looking for space to those who want to transform it and those who want to live one single area of the home in a multi-purpose way" explains Jan Van Hecke. Le Boone International was set up in a period when house prices were growing all the time: "with the rooms getting smaller, I glimpsed an opportunity. Thirty years ago, I started creating solutions for safeguarding space, fitting out small rooms with furniture items that had a dual function so the room could be a living room by day and a bedroom at night" says Van Hecke.

The market of Le Boone International developed enormously within a short space of time, and that's why the company soon began to feel the need for machinery that would help speed up the production process so that the many market requests could be met. It decided straight away to invest, purchasing a whole Biesse line that now allows it to greatly reduce production and shipment times.

"After thoroughly analysing the market and evaluating the various solutions, we turned to Biesse. We received substantial technical support during the initial phase of choosing the product, discovering the multitude of possibilities in the huge Biesse range. Six months ago, we opted for a complete solu-

tion with a number of machines that work simultaneously in a line. "First of all", continues Jan Van Hecke, "the Brema Eko 2.1, a vertical boring machine for real time panel machining, the Stream A lateral edgebanding machine, and the Selco WN6 - a panel saw that stands out from its competitors for its amazing flexibility. The extent of the range, the flexibility of the products and the integration of technologies are the factors that have confirmed the efficacy and validity of our choice. For us, this has meant notable time saving, to the extent that after just one month we went from 3-month delivery times to just one and a half weeks, or two at the most. And all this with a general increase in the quality level as well. As a result, we've purchased a total of three Biesse machines", . concludes Van Hecke



### 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

