

SKI PPER 100

NUMERICAL CONTROL
MACHINING CENTRE



 Biesse

TOP RESULTS WHEN MACHINING TWO PANELS SIMULTANEOUSLY



THE MARKET REQUIRES

a change in production processes to meet the ever growing request for personalised products to satisfy customers' specific needs, coupled with quick and certain delivery times.

BIESSE RESPONDS

with **technological solutions** able to satisfy the requirements of companies producing to order, notably reducing their production costs. **Skipper 100** is the innovative numerical control machining 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.

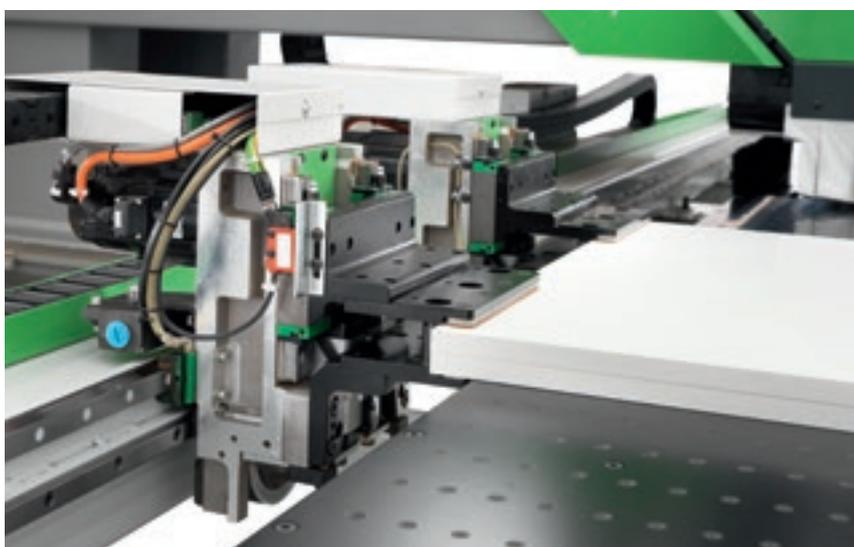


SKIPPER 100

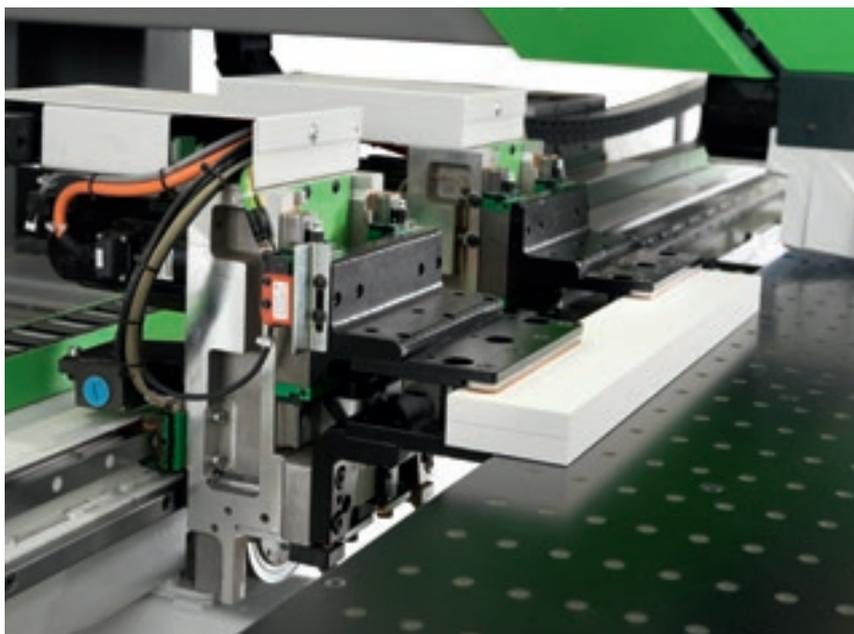
- TOTAL MACHINING FLEXIBILITY WITHOUT INTERRUPTIONS OR MANUAL INTERVENTIONS
- OPTIMUM PRECISION
- EXCELLENT RESULTS THANKS TO THE SIMULTANEOUS MACHINING OF TWO PANELS
- SIMPLE TO PROGRAM AND USE

SIMPLICITY AND GENIUS

Patented system with fixed tools and mobile air cushion panels between the work tables. Skipper 100 can simultaneously machine **above and below** - even two panels per cycle.



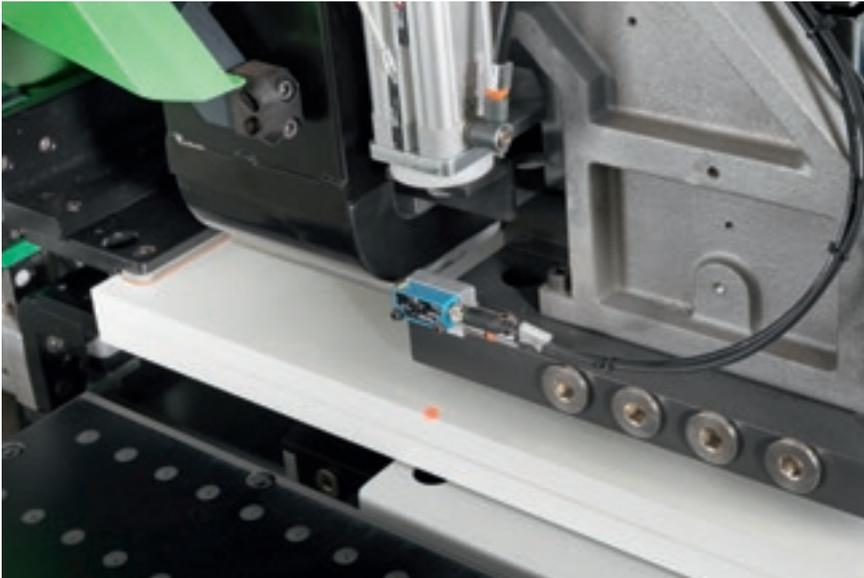
Total flexibility when machining panels of any size and thickness. Simultaneous machining operations from above and below in real time, without any interruptions and without the need to pass the panels through the machine more than once.



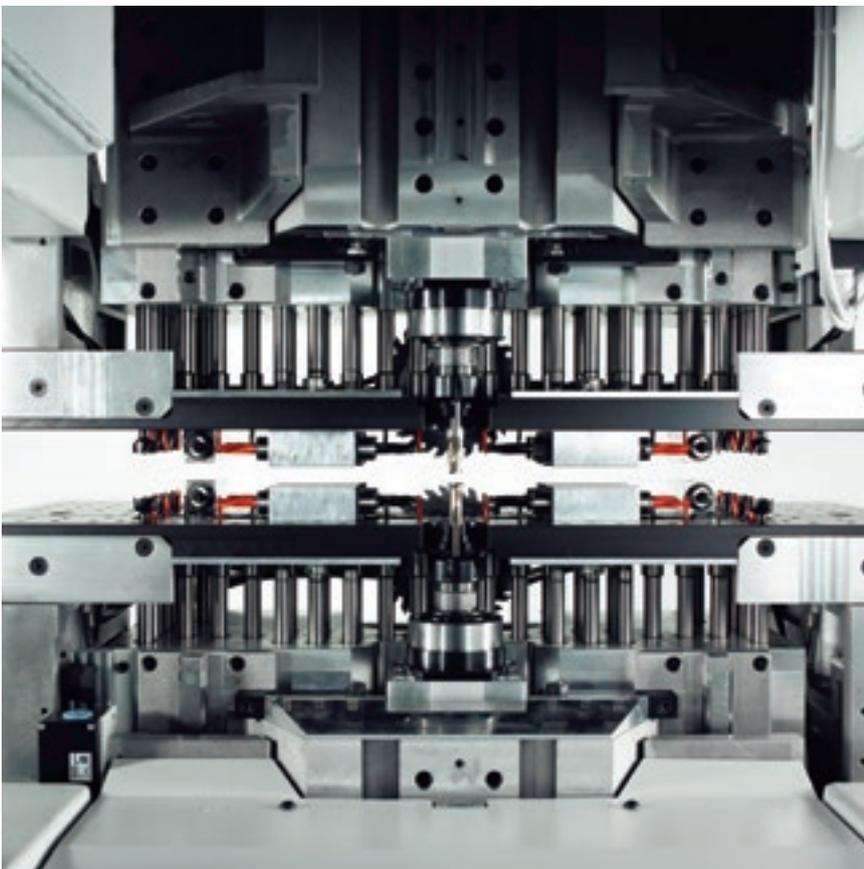
To start, you just need the work program; no tools, adjustments or tests are necessary because the panel is clamped with automatically positioned vices.

MAXIMUM HOLD ON PANELS
OF ANY MATERIAL AND FORMAT

Wasted time is **eliminated**. Skipper can machine **special panels in sequence too**. Total flexibility means preparation time=zero. Skipper changes task **on the spot**, always guaranteeing top results even with **batch 1** production.



The size detection system measures the exact X-Y panel dimensions **in real time**, automatically adapting the machining positions.



Skipper can activate up to 82 tools **in real time**, and reach movement speeds of more than 100 m/min in absolute safety.

THROUGH MACHINING OPERATIONS WITH NO SPLINTERING, THANKS TO THE USE OF 2 OPPOSED OPERATING SECTIONS

FILE X BILITY



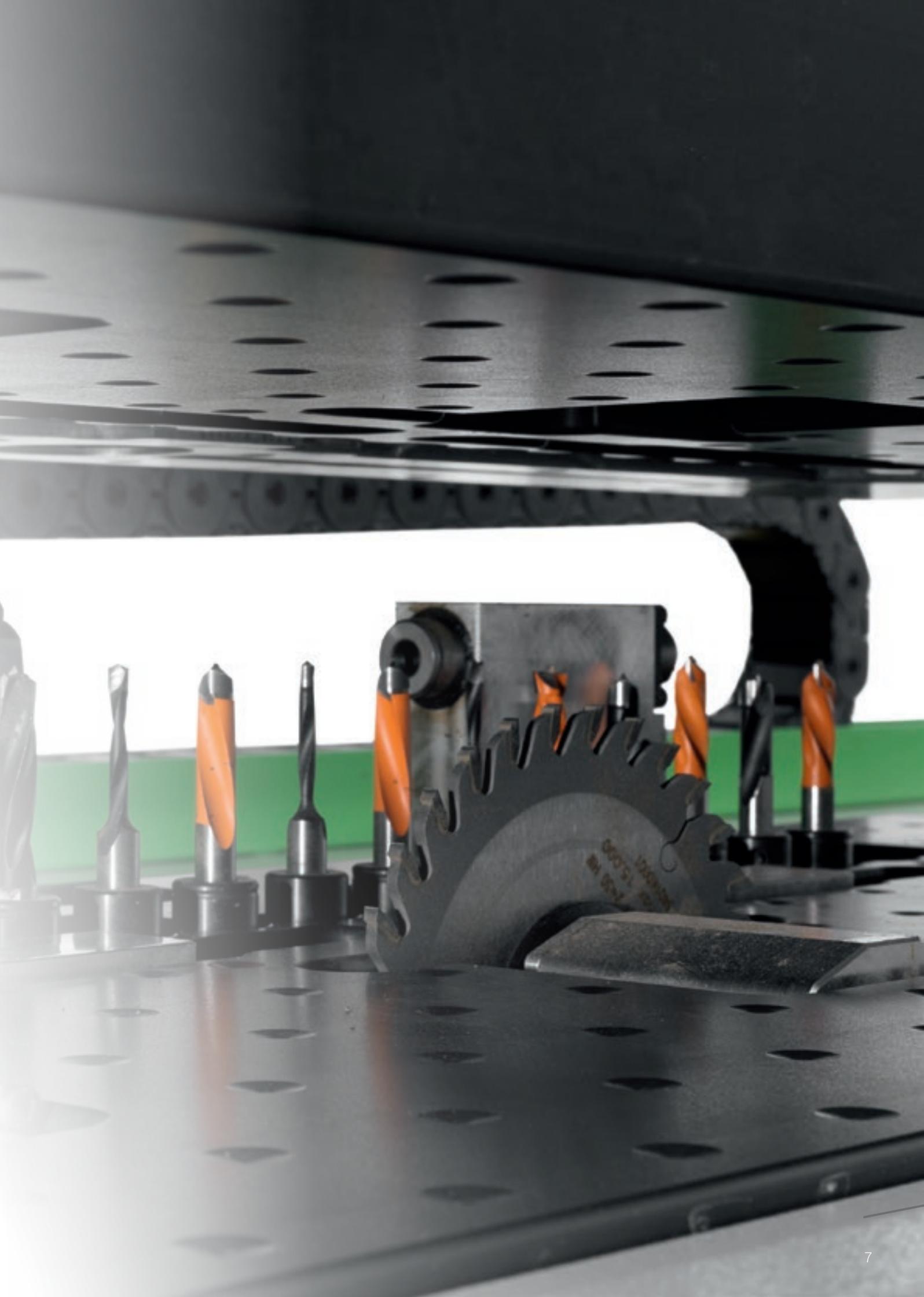
REAL TIME MACHINING

Long term reliability and precision. Material transformation cost reduction of over 60%.

Maximum yield for batch 1 production.

Easy use for everyone.

The 2 powerful opposing operating sections with 39+39 independent spindles can work 2 overlapping panels simultaneously, thereby doubling productivity levels. Skipper moves the panels in X and Y on an air cushion surface, in relation to the fixed tools. The panels move between the air cushions, processing one single panel or 2 mirrored panels simultaneously.

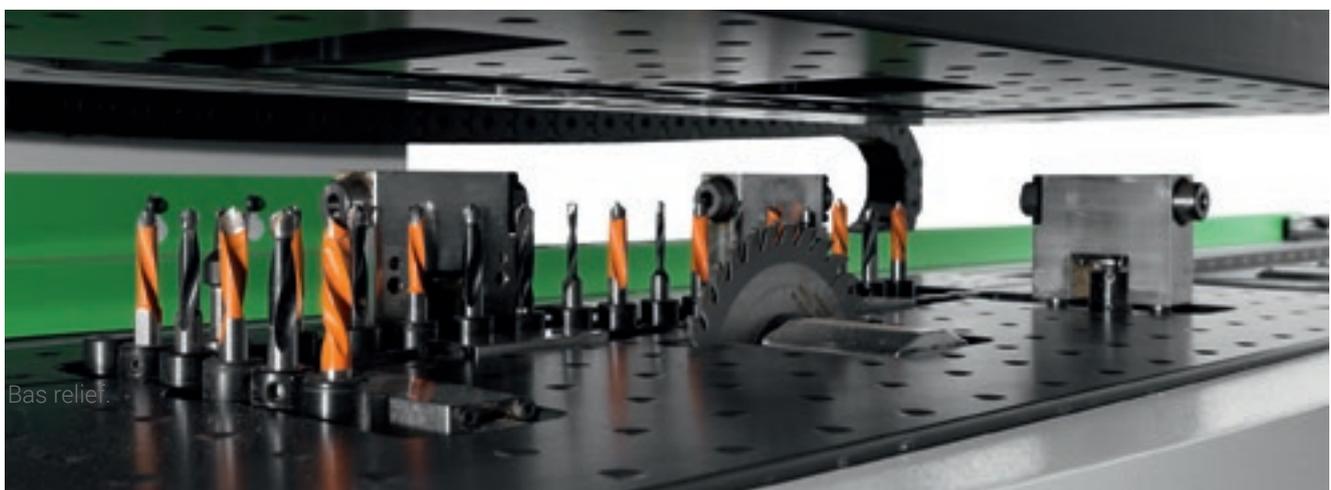


EXCELLENT MACHINING PRECISION



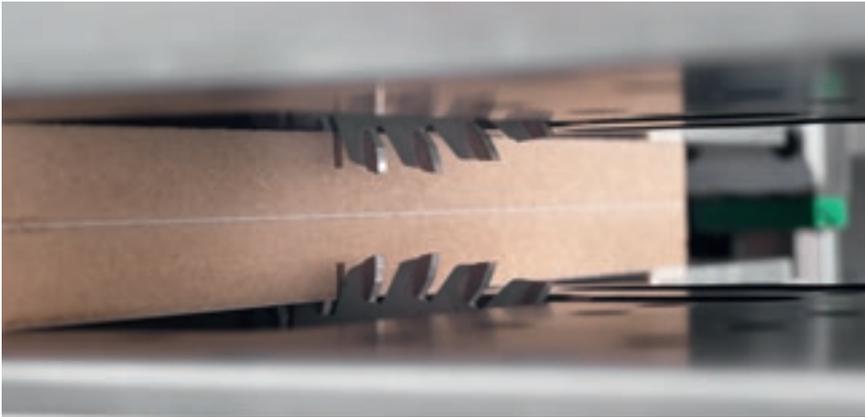
The machining of the machine base on single-positioning processing centres guarantees optimum precision for mechanical operations. The fixed operating sections (and mobile panels) ensure long-term machining accuracy and reliability.

EASY, QUICK TOOLING OF BOTH OPERATING SECTIONS



Bas relief.

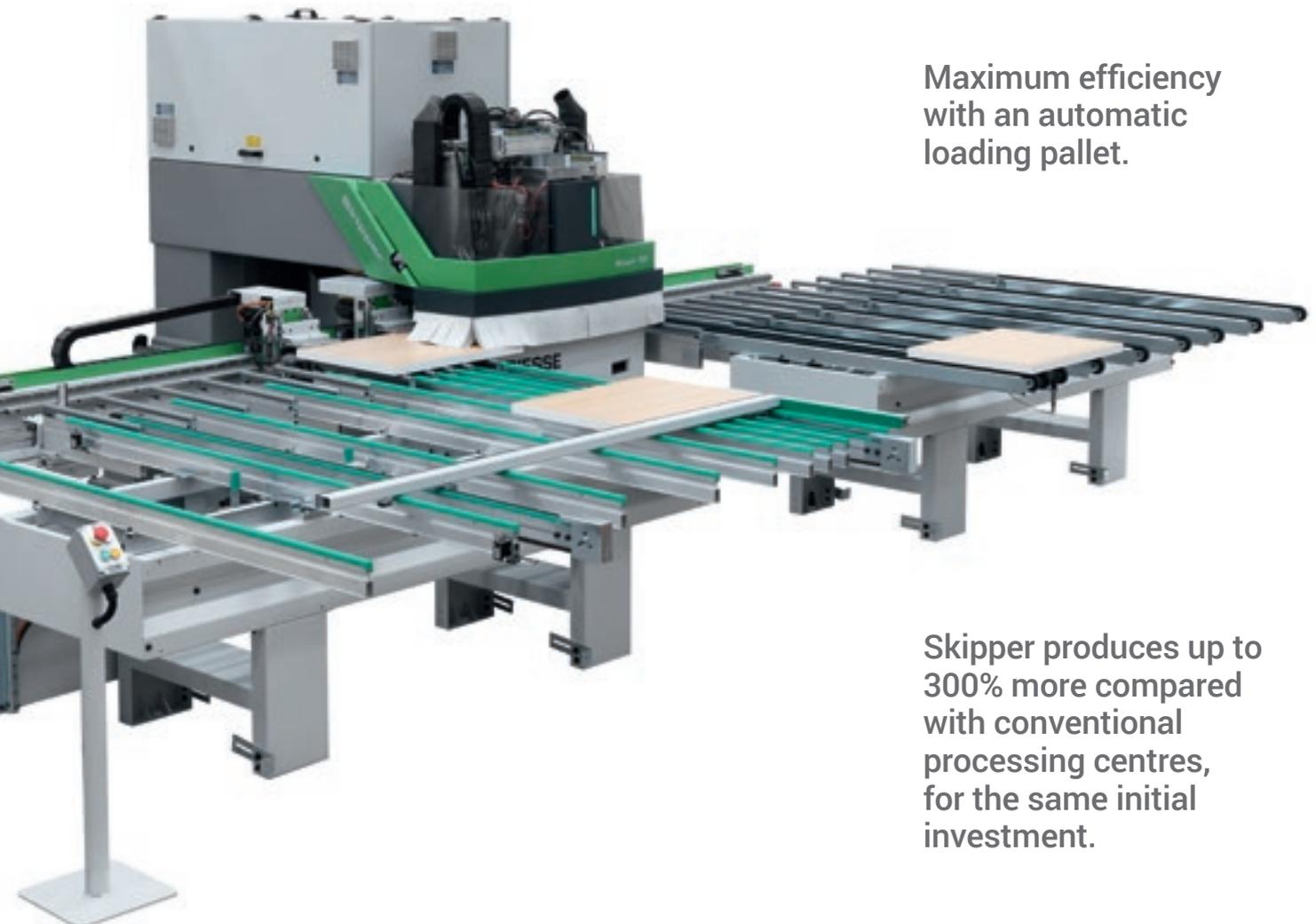
No need for tooling operations or additional adjustments: Skipper 100 is always ready for use.



Blade units for channels in the X direction.



Electrospindles with HSK D-50 coupling.



Maximum efficiency with an automatic loading pallet.

Skipper produces up to 300% more compared with conventional processing centres, for the same initial investment.

MAXIMUM OPERATOR SAFETY

Perimeter protection and sensitive footboards at the front, to keep all the danger areas safe.



Sound-absorbent covers for the operating sections, with curtain guard barriers (with integrated suction) to protect against dust and waste.

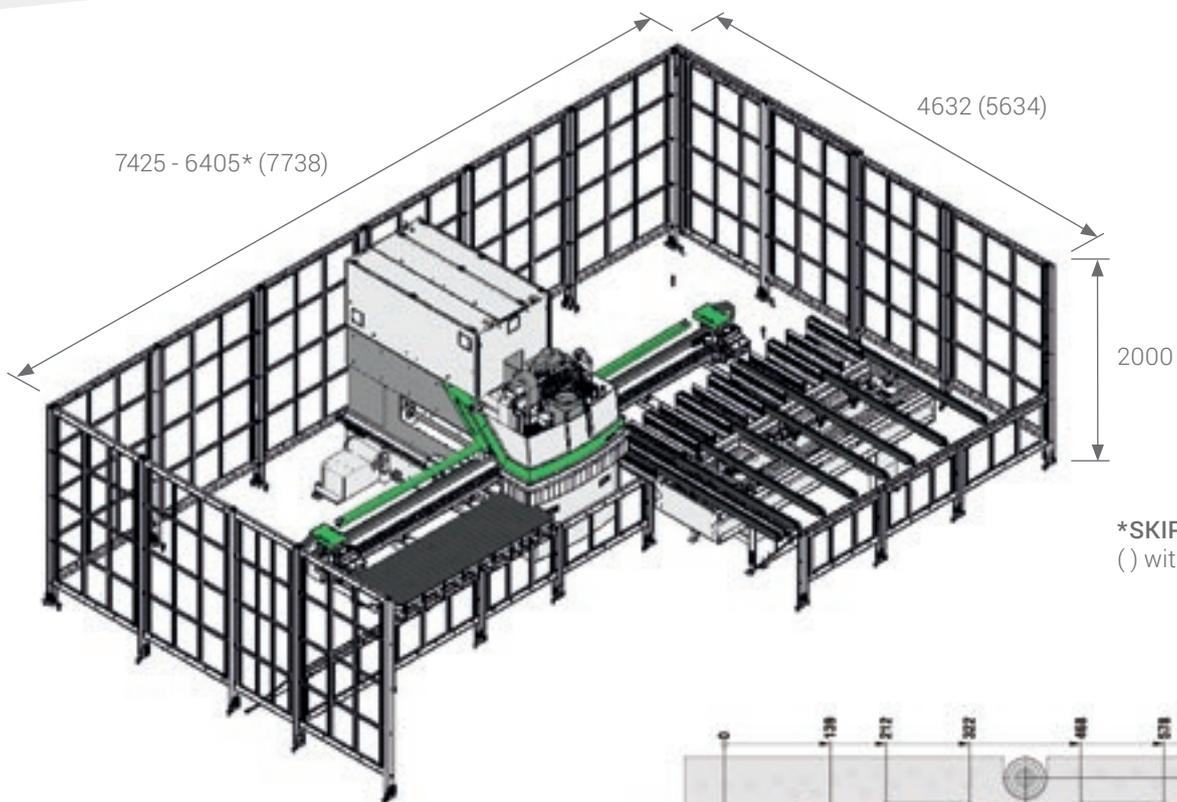
SIMPLE TO PROGRAM AND USE



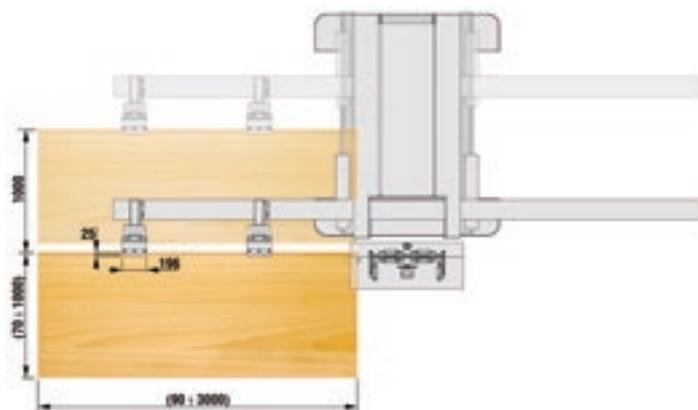
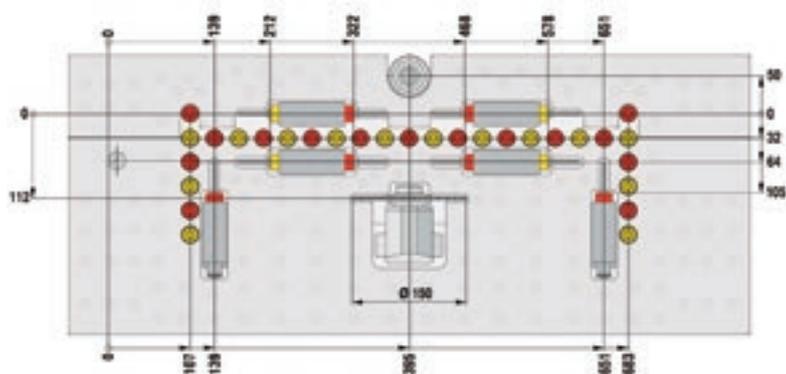
An extremely powerful yet user-friendly operator interface that allows quick decisions and automatically optimises the cycle on the basis of the tools available, to minimise work times.



TECHNICAL DATA



*SKIPPER 100 S
() with loading pallet



SKIPPER 100

Machinable panel length (Skipper 100 L) (min-max)	inch	3.5 / 118.1
Machinable panel length (Skipper 100 S) (min-max)	inch	3.5 / 98.4
Width of machinable panels (min-max)	inch	2.7 / 39.4
Thickness of machinable panels (min-max)	inch	0.3 / 2.4
Vertical drilling spindles (above+below)		29 + 29
Drilling spindle rotation speed (max)	rpm/min	4000
Horizontal drilling spindles in X (above+below)		8 + 8
Horizontal drilling spindles in Y (above+below)		2 + 2
Electrospindle (above+below)	kW	3.5 - 1+1
Electrospindle rotation speed (min-max)	rpm/min	7000 / 18000
Blade unit diam. 150 mm (above+below)	kW	1.7 - 1+1 (alternate)
Blade unit diam. 160 mm (above+below)	kW	3.5 - 1+1 (alternate)

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.

Machine type: Skipper 100L - Skipper 100S

Operating conditions:

Milling: 1 electrospindle, feed: 6m/min, rotation: 18000 rpm, Ø 16mm, depth: 5mm, material: chipboard. Sound pressure level on operator workstation (LpA) 81.5 dB (A).

Superficial weighted noise level A (LwA) 103.6 dB (A), drilling: 1 drilling unit, feed: 3m/min, rotation: 6000 rpm, Ø 8mm, depth: 10mm, material: chipboard. Weighted sound pressure level A in:

Operator workstation LpFA 82 dB (A).

Loading/unloading position LpFA 79 dB (A).

Operating conditions: profiling of alder solid wood, thickness: 78 mm.

Uncertainty factor K = 4 dB (A).

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.

INDUSTRY 4.0 READY



Industry 4.0 is the new industry frontier, based on digital technologies and on machines that speak to companies. The products driving this revolution can communicate and interact independently within production processes, which in turn are connected via intelligent networks.

Biesse's commitment is to transform our customers' factories with real-time technology, ready to guarantee digital manufacturing opportunities, with smart machines and software packages becoming vital tools that facilitate the daily tasks of people all over the world processing glass, stone, metal and more. Our philosophy is a practical one: to supply entrepreneurs with solid data that can help them to lower their costs, optimise their processes and improve their results.

And that means being 4.0 ready.

MADE WITH BIESSE

BIESSE GROUP TECHNOLOGIES JOIN FORCES WITH LAGO'S INNOVATION AND TOTAL QUALITY MANAGEMENT PROCESSES

In the crowded world of domestic design, Lago takes its place as an emerging brand, thanks to a collection of stimulating products and a corporate philosophy that embraces the interaction between business and art, coupled with on-going research into sustainable development. "We created a number of projects, or rather, concepts - states Daniele Lago - that have shaped Lago as we see it today: we saw design as a cultural vision that applies not only to individual products, but rather to the entire business chain". "Flexibility is the key word here at Lago" says Carlo Bertacco, Manufacturing Manager. "We started

to introduce the concept of processing only outstanding orders, which enabled us to reduce our footprint and empty the site from the very beginning". "The machinery that we purchased - states Bertacco - is great, it entailed a limited investment versus the capabilities it offers and is linked to a specific manufacturing approach. What I am talking about is a given manufacturing volume with Lago-standard quality levels and the possibility of customising as late as possible, at the customer's request: in short, the very basic principles of lean manufacturing".

*Source: IDM Industria del Mobile
Lago, our customer since 1999, is one of most prestigious Italian furniture brands in the world.*



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.

AN EXCELLENT LEVEL OF SERVICE

+550

HIGHLY SPECIALISED
TECHNICIANS AROUND
THE WORLD, READY TO HELP
CUSTOMERS WITH EVERY
NEED

90%

OF MACHINE DOWN CASES
WITH RESPONSE TIME
UNDER 1 HOUR

+100

EXPERTS IN DIRECT
CONTACT THROUGH
REMOTE CONNECTIONS
AND TELESERVICE

92%

OF SPARE PARTS ORDERS
FOR MACHINE DOWNTIME
PROCESSED WITHIN 24
HOURS

+50.000

ITEMS IN STOCK IN THE
SPARE PARTS WAREHOUSES

+5.000

PREVENTIVE MAINTENANCE
VISITS

80%

OF SUPPORT REQUESTS
SOLVED ONLINE

96%

OF SPARE PARTS ORDERS
DELIVERED IN FULL ON TIME

88%

OF CASES SOLVED WITH
THE FIRST ON-SITE VISIT

Founded in Italy,
international native.

We simplify your
manufacturing
to make the process
of any material



ur
g process
potential
I shine.

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.

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