

SKI PPER 100

NUMERICAL CONTROL
PROCESSING CENTRE



 **BIESSE**

 YEARS
 **BIESSEGROUP**

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 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.



SKIPPER 100

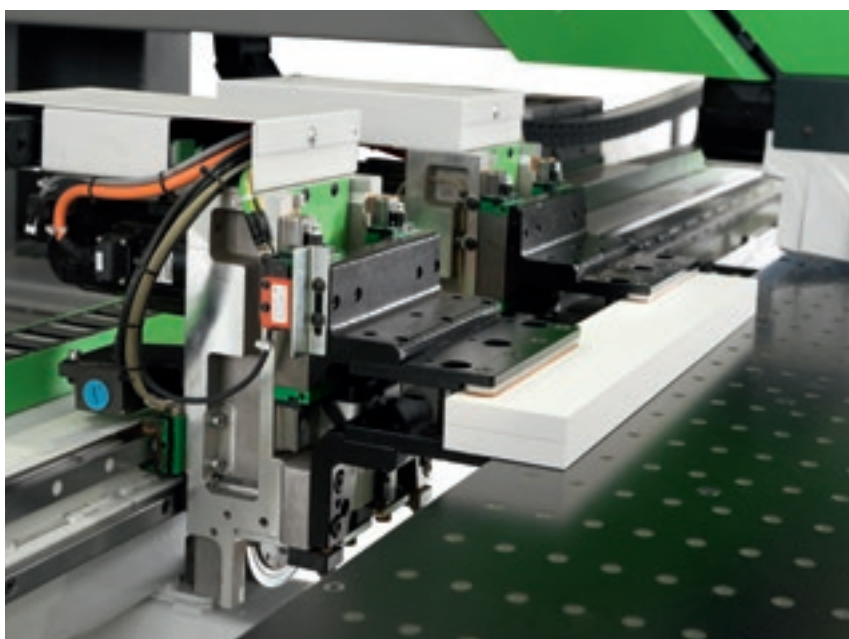
- ✔ TOTAL MACHINING FLEXIBILITY WITHOUT INTERRUPTIONS OR MANUAL INTERVENTIONS
- ✔ OPTIMUM PRECISION
- ✔ EXCELLENT RESULTS THANKS TO THE SIMULTANEOUS MACHINING OF TWO PANELS
- ✔ SIMPLE TO PROGRAM AND USE.

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.**



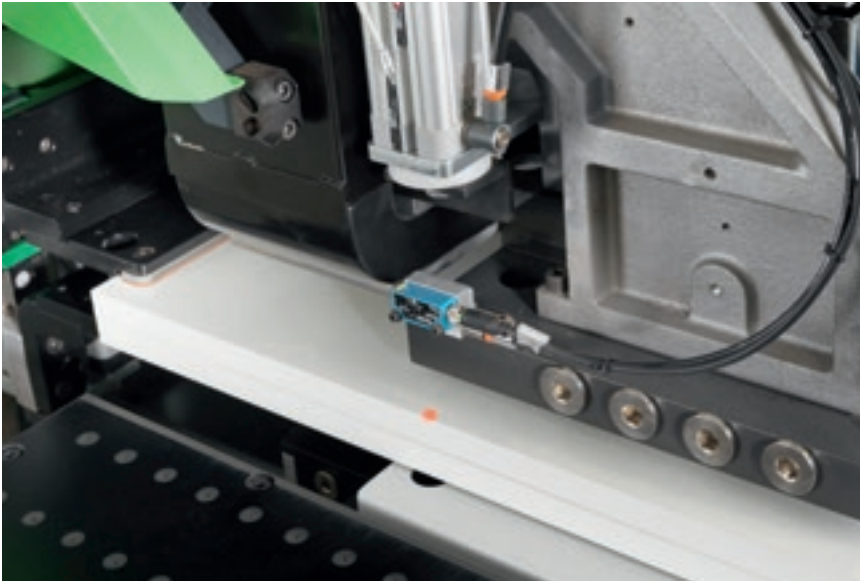
Total flexibility when machining panels of any size and thickness. Simultaneous machining operations from above and below in real time, without any interruptions and without the need to pass the panels through the machine more than once.



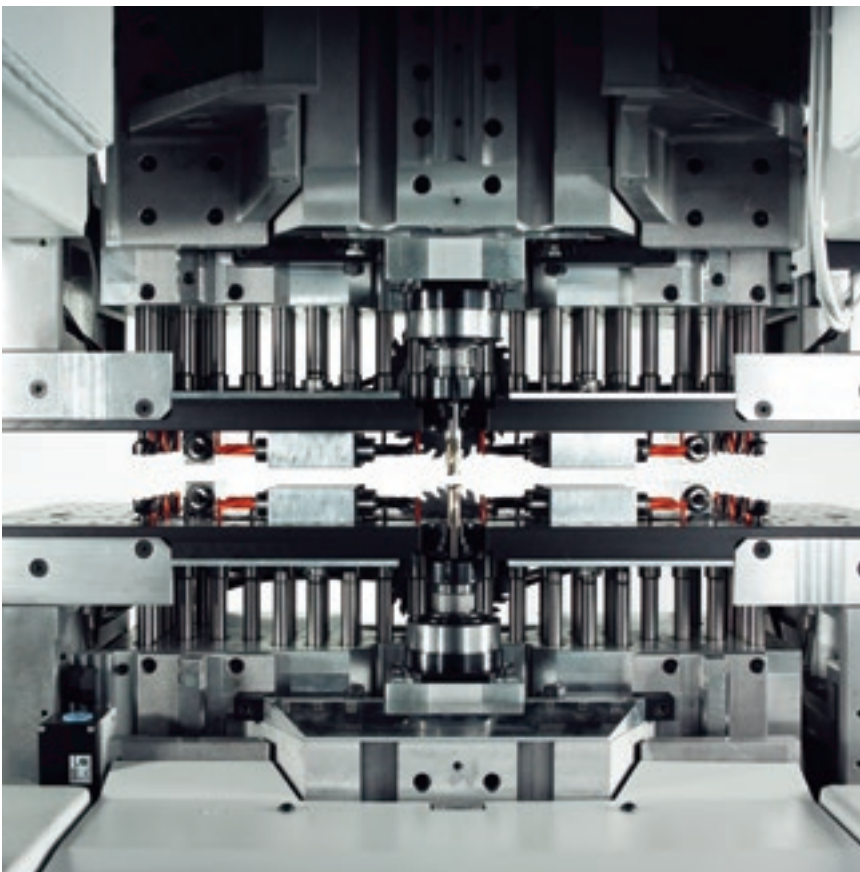
To start, you just need the work program; no tools, adjustments or tests are necessary because the panel is clamped with automatically positioned vices.

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 100m/min in absolute safety.

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

EFFICIENT FLEXIBILITY

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



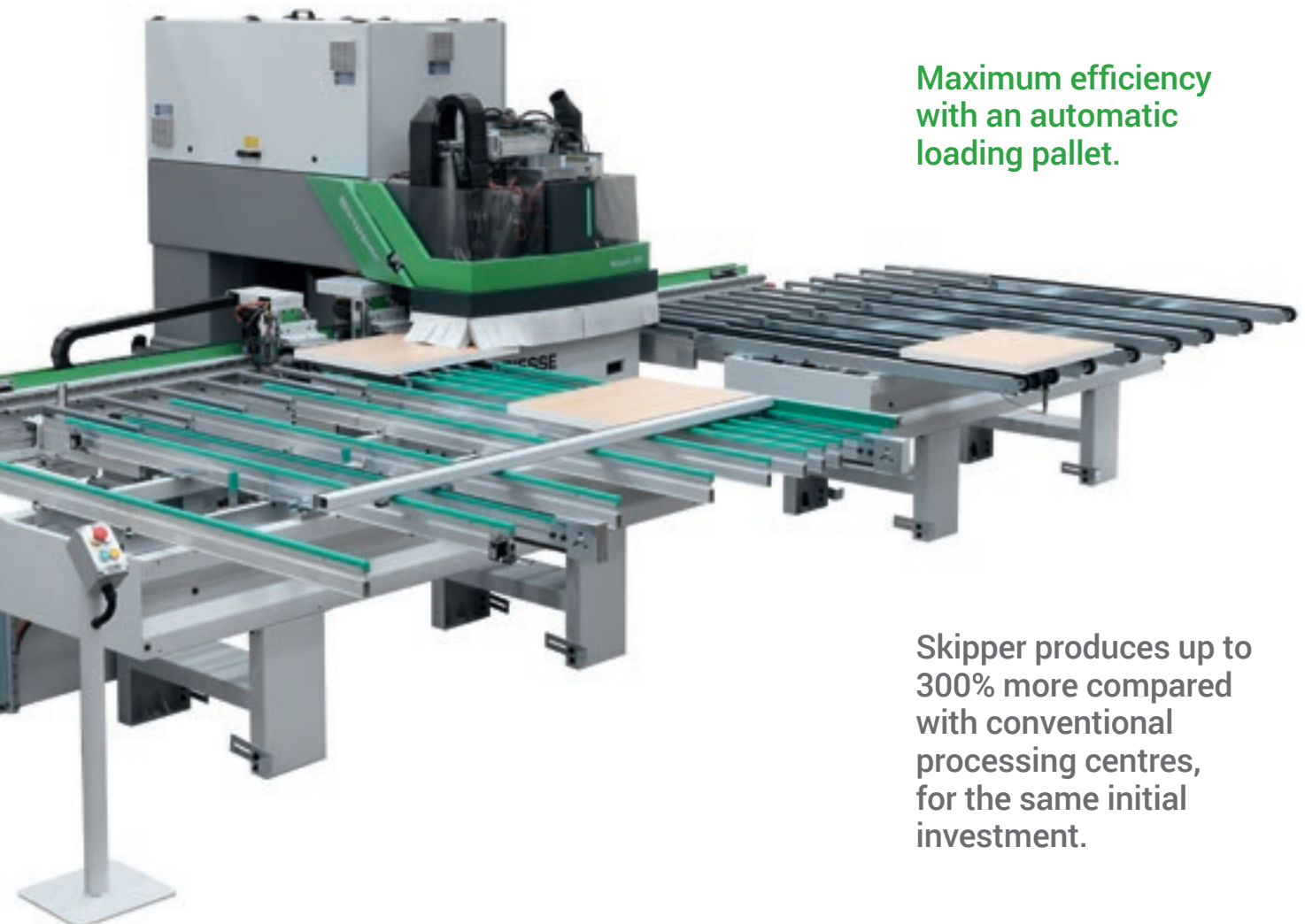
No need for tooling operations or additional adjustments: Skipper 100 is always ready for use.



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.

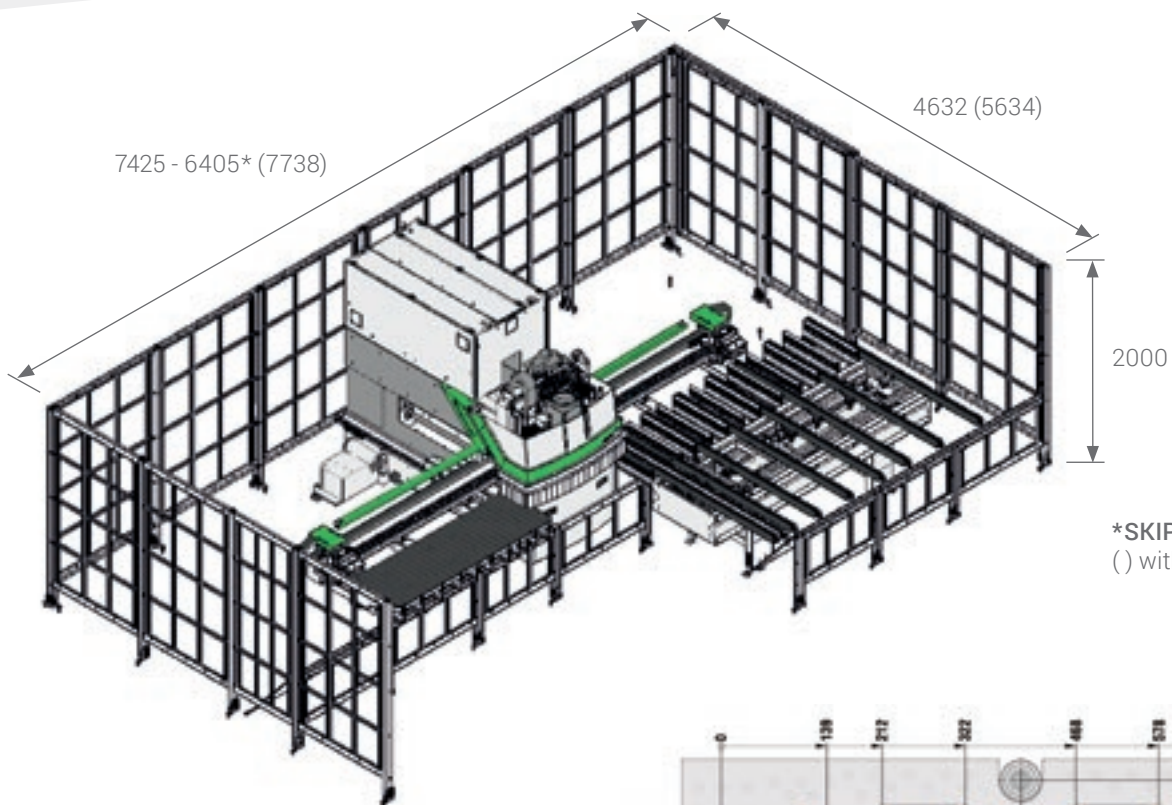
SIMPLE TO PROGRAM AND USE



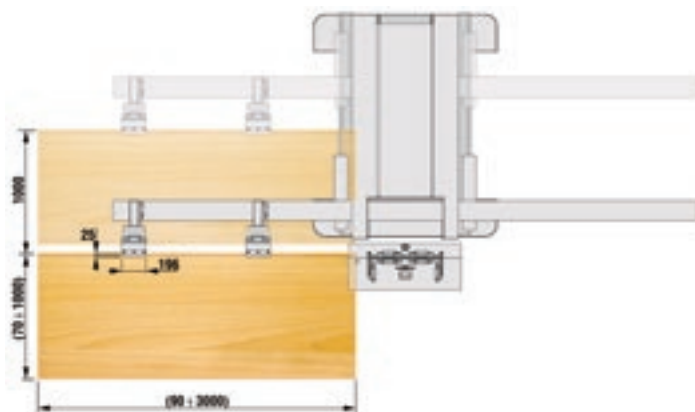
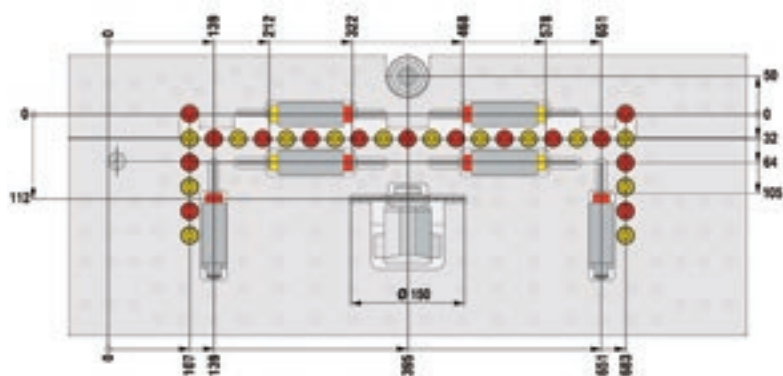
An extremely powerful yet user-friendly operator interface that allows quick decisions and automatically optimises the cycle on the basis of the tools available, to minimise work times.



TECHNICAL DATA



*SKIPPER 100 S
() with loading pallet



SKIPPER 100

Machinable panel length (Skipper 100 L)	90 - 3000 mm	3.5 - 118.1 inches
Machinable panel length (Skipper 100 S)	90 - 2500 mm	3.5 - 98.4 inches
Width of machinable panels	70 / 1000 mm	2.7 / 39.4 inches
Thickness of machinable panels	8 - 60 mm	0.3 - 2.4 inches
Vertical boring spindles (above+below)	29 + 29	
Boring spindle rotation speed (max)	4000 rpm	
Horizontal boring spindles in X (above+below)	8 + 8	
Horizontal boring spindles in Y (above+below)	2 + 2	
Electrospindle kW 3.5 (above+below)	1 + 1	
Electrospindle rotation speed (min-max)	7000 / 18000 rpm	
Blade unit diam. 150 mm (above+below) 1.7 kW	1+1 (alternate)	
Blade unit diam. 160 mm (above+below) 3.5 kW	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.

Weighted sound pressure level A (LpA) during machining at the operator's workstation on the vane-pump machine Lpa=79dB(A) Lwa=96dB(A) Weighted sound-pressure level A (LpA) at the operator's workstation and sound power level (LwA) during machining on the cam-pump machine Lwa=83dB(A) Lwa=100dB(A) Measurement uncertainty K 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.

INDUSTRY 4.0 READY

A photograph of a dark grey metal structure in a factory setting. The words "INDUSTRY 4.0 READY" are printed on it in white and green. The background is blurred, showing factory lights and equipment.

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.

IDEAS TAKE FORM AND SHAPE



B_CABINET IS A UNIQUE SOLUTION FOR MANAGING FURNITURE PRODUCTION FROM THE 3D DESIGN PHASE TO PRODUCTION FLOW MONITORING. IT'S NOW POSSIBLE TO PLAN THE DESIGN OF A SPACE AND QUICKLY PASS FROM CREATING THE SINGLE ELEMENTS TO GENERATING PHOTO-REALISTIC CATALOGUE IMAGES, FROM GENERATING TECHNICAL PRINTS TO PRODUCING REQUIREMENT REPORTS, AND ALL IN ONE SINGLE ENVIRONMENT.

B_CABINET FOUR, SUPPLEMENTARY MODULE, MAKES IT EASY TO MANAGE ALL THE WORK PHASES (CUTTING, MILLING, BORING, EDGE-BANDING, ASSEMBLY, PACKAGING), JUST WITH A CLICK.

B_CABINET FOUR INCLUDES AN ENVIRONMENT DEDICATED TO THE REAL TIME MONITORING OF THE PROGRESS OF THE PRODUCTION PHASES. THAT MEANS COMPLETE CONTROL OF THE ORDER STATUS, STEP BY STEP, THANKS TO CHARTS AND 3D IMAGES.

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 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 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.*

LAGO.IT



LIVE THE EXPERIENCE

BIESSEGROUP.COM



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

