

# ELIX

## DRILLING/INSERTING MACHINE



# MAXIMUM HORIZONTAL DRILLING FLEXIBILITY



## THE MARKET EXPECTS

a change in manufacturing processes that enables companies to accept **the largest possible number of orders**. This is coupled with the need to maintain high quality standards and customisation of products with quick and defined delivery times, as well as responding to the needs of highly creative designers.

## BIESSE RESPONDS

with **technological solutions** that enhance and support the technical expertise and the knowledge of processes and materials. **Elix** is the smallest drilling/dowel inserting machine in the range, designed to make bores, apply glue and insert dowels on horizontal elements in a flexible manner. It can be configured to meet the customer's needs, and is ideal for manufacturing kitchens, furniture, drawers and small pieces for batch 1 machining.



# ELIX

- MAXIMUM QUALITY AND PRECISION FOR DRILLING AND INSERTION OPERATIONS
- VARIOUS POSSIBLE CONFIGURATIONS
- POSSIBILITY TO WORK DIFFERENT FORMATS IN SEQUENCE
- USER-FRIENDLY

# MAXIMUM QUALITY AND PRECISION

Quick, flexible and efficient, Elix is the most reliable range of drilling/inserting machines on the market. Thanks to its technology, it ensures that the glue and dowels are always correctly inserted, with the extra guarantee of control systems too.



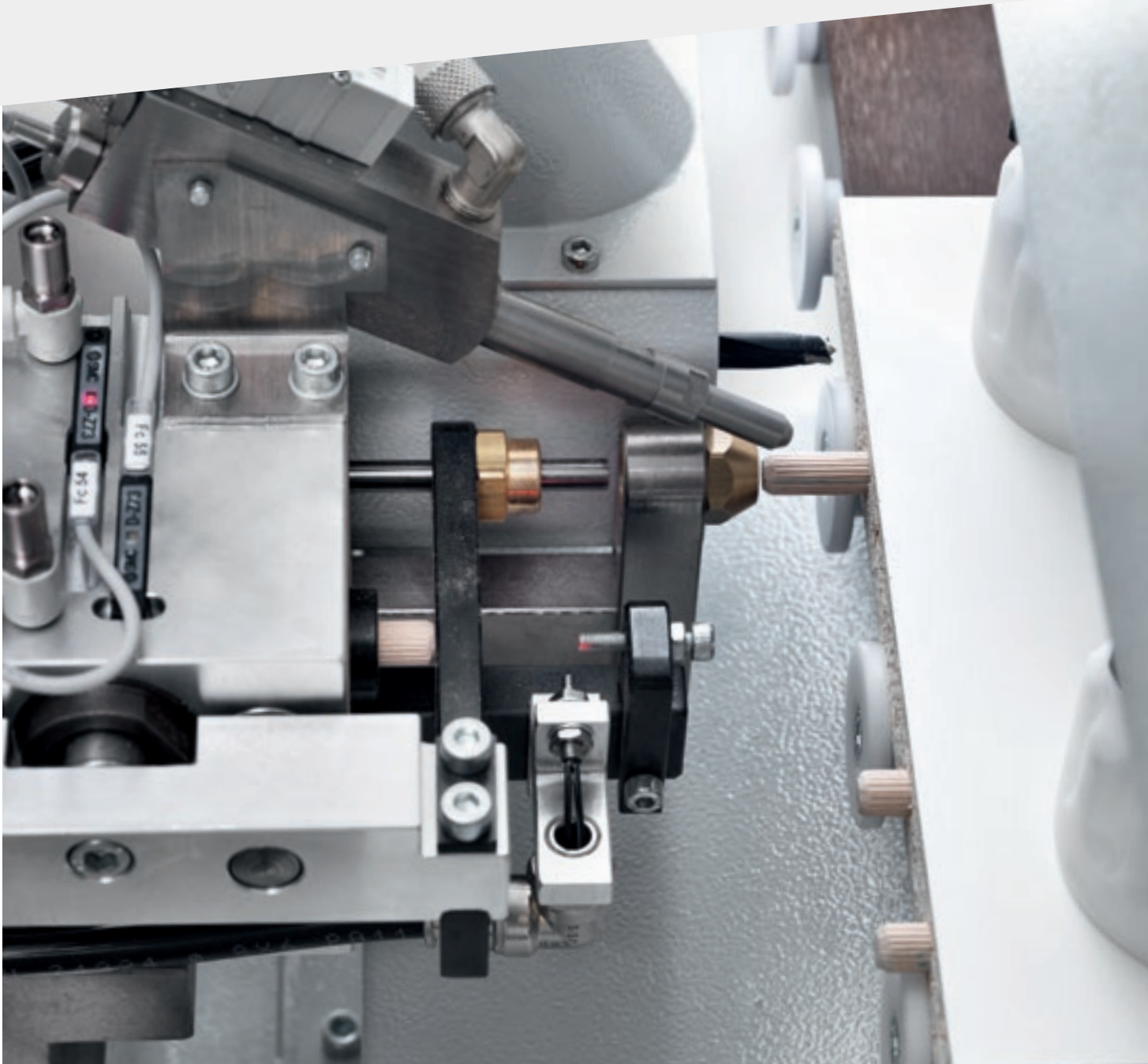
Elix has two independent working areas, allowing panels to be machined alternately on the opposite origins with loading and unloading operations carried out while the machine is running.



The base, open on the two opposite sides, and the retractable stops, mean that large panels can be worked without problems. The vertical pressers that hold the panels in place during the job are assembled directly on the machine base to guarantee optimum rigidity and reliability during machining operations.



## SIMULTANEOUS DRILLING AND DOWEL INSERTION



### MAXIMUM PERFORMANCE FOR EVERY FUNCTION, WHETHER DRILLING OR DOWELLING

Quick and flexible panel machining is what characterises Elix, the compact and high-performance drilling/inserting machine that can work different panels in sequence with no interruption. It can be personalised to meet the customer's needs, and can be used downstream of a nesting centre to complete the machining of horizontal elements.

# VARIOUS POSSIBLE CONFIGURATIONS



## ELIX<sub>x1</sub>

The most compact model of the range. Quick, high-performance drilling and insertion, at a competitive price.

The standard machine is configured with a horizontal operating section fitted with a horizontal spindle, a glue injector and a dowel insertion device.

This configuration makes the machine flexible and particularly suited to batch 1 processing.



Elix is equipped as standard with a **laser system that detects** the real panel length and can then automatically correct the working positions as necessary, guaranteeing perfect box assembly.



## ELIX<sub>x4</sub>

Enhanced standard fittings, plus the possibility to obtain boosted performance by personalising the machine with various optionals to meet specific needs.

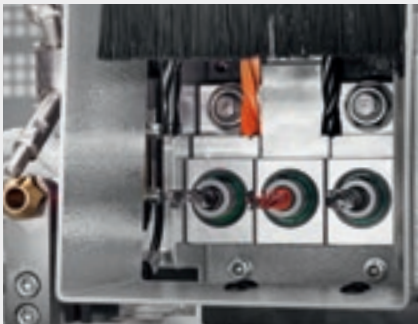
Greater drilling capacity: up to 3 independent horizontal spindles.

Possibility to equip the machine with 1 vertical spindle.

# TOP OF THE RANGE SOLUTION, MAXIMUM CONFIGURABILITY

## ELIX<sub>x6</sub>

The top solution of the range, even faster and more flexible thanks to the possibility to employ a higher number of spindles - both horizontal and vertical - and the fact that all the axes are controlled.



Standard drilling unit fitted with 3 horizontal spindles + 3 vertical spindles.



Optional drilling unit fitted with 5 horizontal spindles + 5 vertical spindles.



The machine can be equipped with a horizontal and vertical milling unit for making grooves, pockets and slots and for machining Clamex lamello.



**LED bar**  
makes it easier for the operator  
to use the machine.

The device, available in the X4 and X6 models, tells the operator:

- ▀ The length of the panel to be loaded
- ▀ The active working area
- ▀ The position of the vertical pressers
- ▀ The machine status

# PROCESSING OF DIFFERENT FORMATS IN SEQUENCE



All the X/Y/Z axes are motorised, thereby eliminating every manual adjustment. High machining flexibility thanks to the possibility to create bores of different types and at different positions on the same panel.



Optimum hold on even small panels, thanks to a dedicated locking system. Possibility to lock pieces with a width of just 40 mm.



## RELIABILITY AND PRECISION

High-pressure glue pump system: doubles the operating pressure for first class injection efficiency and speed, guaranteeing a flawless end product.

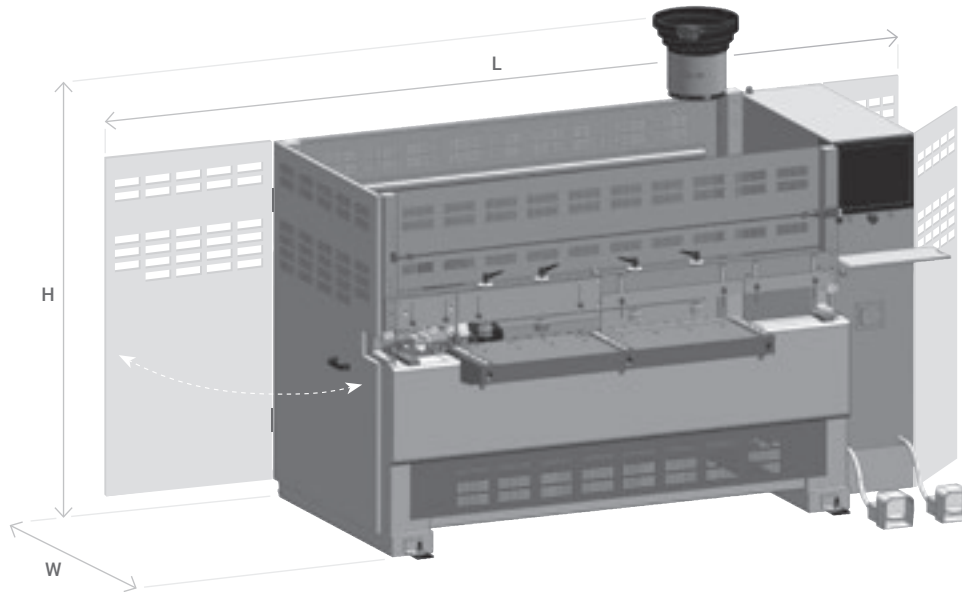


## EASY TO USE

PC with Windows operating system, high-level software interface that's simple and user-friendly whatever your level of experience.



# TECHNICAL SPECIFICATIONS



## OVERALL DIMENSIONS

		L	W	H
Elix X1	inches / mm	134 / 3417	55 / 1406	72 / 1838
Elix X4	inches / mm	166 / 4230	63 / 1606	78 / 1980
Elix X6	inches / mm	169 / 4285	62 / 1571	78 / 1980
Length of machinable panels (max)			inches / mm	51 / 1300
Thickness of machinable panels (max)			inches / mm	1.5 - 2.3 / 40 - 60
Max no. of horizontal spindles Elix X1 - X4				01 - mar
Max no. of horizontal spindles Elix X6				5
Horizontal tool rotation speed			rpm	6000
Max horizontal drilling depth			inches / mm	1,1 / 30
No. of dowel insertion units				1
Dowel insertion device (standard diameter)			inches / mm	0.3 x 1.1 / 8 x 30
Max no. of vertical spindles Elix X4 (opt.)				1
Max no. of vertical spindles Elix X6				5
Vertical tool rotation speed			rpm	4500
Max vertical drilling depth			inches / mm	1.1 / 30
Effective working field in Y (vertical drilling)			inches / mm	1.9 / 50

The technical specifications and drawings are non-binding. Some photos may show the machines complete with optional accessories. Biesse Spa reserves the right to make modifications without prior notice.

A-weighted surface sound pressure level  $L_{pf}$  (at the operator's workstation) 81.0 dB(A)

A-weighted surface sound power level  $L_{w(A)}$  92.0 dB(A)

The measurements were taken respecting standards UNI EN 848 3 2007 UNI EN ISO 3746 2009 (sound power) and UNI EN ISO 11202 2009 (sound pressure at the operator's workstation) during the transit of panels. The noise values indicated are emission levels and do not necessarily represent safe working levels. Although there is a link between emission levels and exposure levels, this cannot be used in any reliable way to define whether further precautions are needed. The factors that determine the exposure level to which the workforce is subjected include exposure duration, the characteristics of the workplace, other dust/noise sources, etc. (i.e. the number of machines and other processes nearby). In any case, this information will enable the machine user to better evaluate the danger and risk.

# MADE WITH BIESSE

## FOR A REVOLUTIONARY BUT CONSCIOUS DESIGN

**Conscious design that understands society and skilfully changes it for the better. That's the mission at the heart of Lago, a furniture company founded in 1976 with two simple concepts encoded in its DNA: curiosity and doing things well.**

The common ground for the Biesse Group and Lago, which reinforces the historic partnership between the furniture and carpentry sectors, is the Alliance project: a collection of brands, people and businesses that have decided to join the design company from Veneto on a journey of respect for our planet, ourselves and our future. The historic partnership is borne out by the innovative production plant that Biesse developed with Lago, completely restructuring the manufacturing site. The result is the inclusion of a new Batch One facility within the existing production context, in the spirit of personalisation, speed and flexibility.

The facility has a new square-edging cell with Stream MDS and Winner W1, a new drilling cell with Skipper 130 and a new Selco WNR 650 sizing centre connected to Win-

store 3D K1, which intelligently manages all the material to be processed.

"Including the 'batch one' process bolsters the 'just in time' objective set by Lago, reducing the warehouses needed for semi-finished products and raw materials, as well as reducing scrap material and elevating product quality. What's more, it improves efficiency, reduces time to delivery and offers complete control over the production flow," explains Mauro Pede, Biesse Systems Sales Director.

"The new investments have led us to a new productive flexibility that we will continue to implement, for a renewed production speed and even greater customisation of the range," adds Daniele.

Carlo Bertacco echoes the sentiment, "We are completing a 2,500 m2 expansion, to be even faster and more flexible while maintaining the extremely high level of quality that Lago is known for. It's an equation that relies heavily on technology: I'm referring to one of the particularly valuable machines we purchased from Biesse – a small 'Brema Eko' – not only is it extremely flexible, it allows us

to greatly simplify some steps, since we can process painted pieces without worrying about damaging them.

It's proof that with clear ideas and a precisely organised work flow one can find simple solutions that produce excellent results."

**LAGO BELIEVES  
THAT DESIGN MUST  
BE GUIDED BY MAN,  
BY HUMANITY AND  
EMPATHY**



**Daniele Lago**  
*Founder*



# 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.



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Identification, shipping and delivery of spare parts.



## **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

**90%**

OF MACHINE DOWN CASES  
WITH RESPONSE TIMES  
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



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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.

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