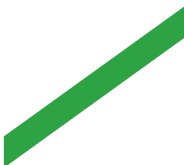


# **BIESSE WINLINE ONE**

Numeric-control Multicentre



When competitiveness  
means increasing  
productivity

WinLin

Made In Biesse

## The market demands

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 whilst offering product customisation with **quick and defined delivery times**, as well as responding to the needs of highly creative designers.

## Biesse meets these requirements

with **high-tech and** user-friendly solutions that leverage and support technical expertise as well as process and material knowledge. **Winline One** is the new Biesse Multicentre designed for the production of standard and custom door and window frames, including arcs. It is aimed at small- and medium-sized firms and door/window frame producers who want to replace their existing lines and systems to achieve greater flexibility.

- ✓ **Maximum productivity in full autonomy.**
- ✓ **Optimal clamping of the component for extremely precise processing operations.**
- ✓ **So many advantages concentrated in a reduced footprint.**

# A lean manufacturing site

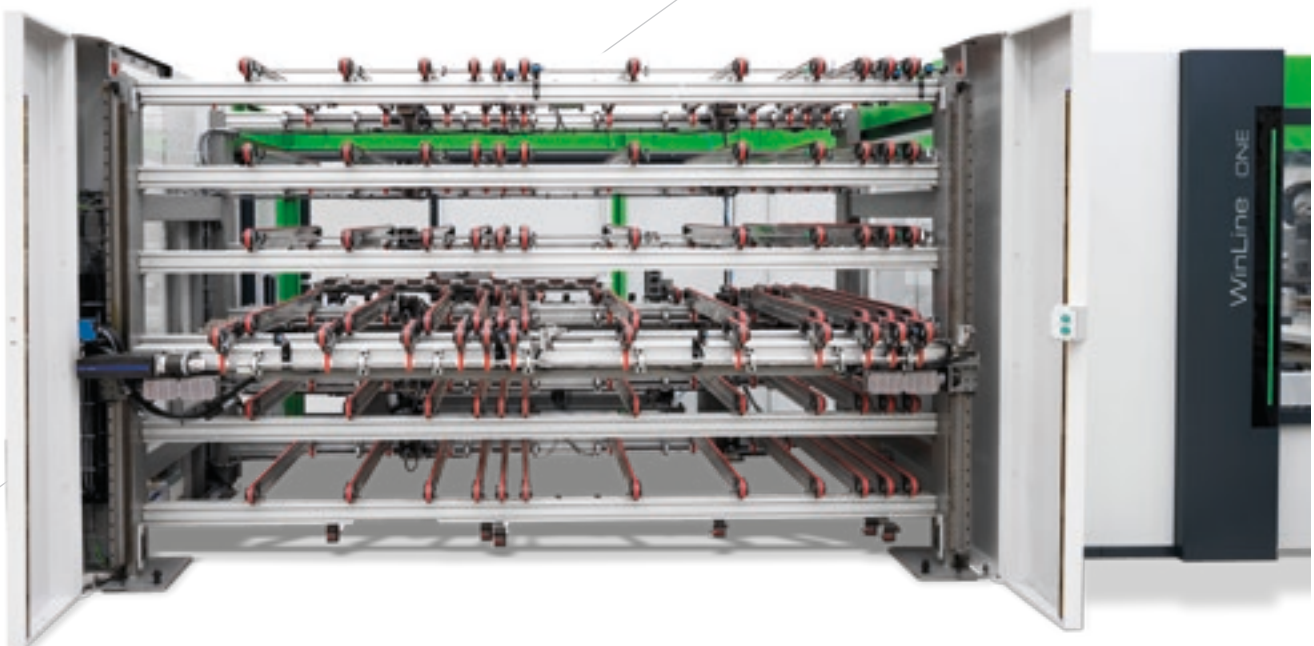


**WINLINE ONE**  
Multicentre for doors and windows



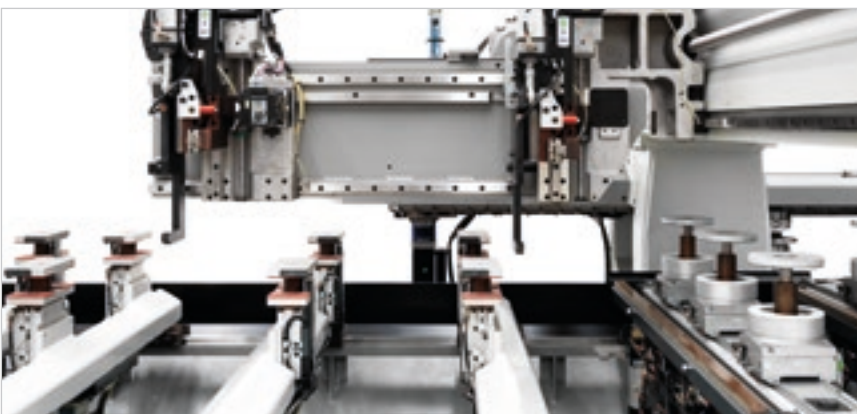
# Maximum productivity in full autonomy

**Maximum load of up to 168 components;  
machine autonomy of up to 3 hours.**

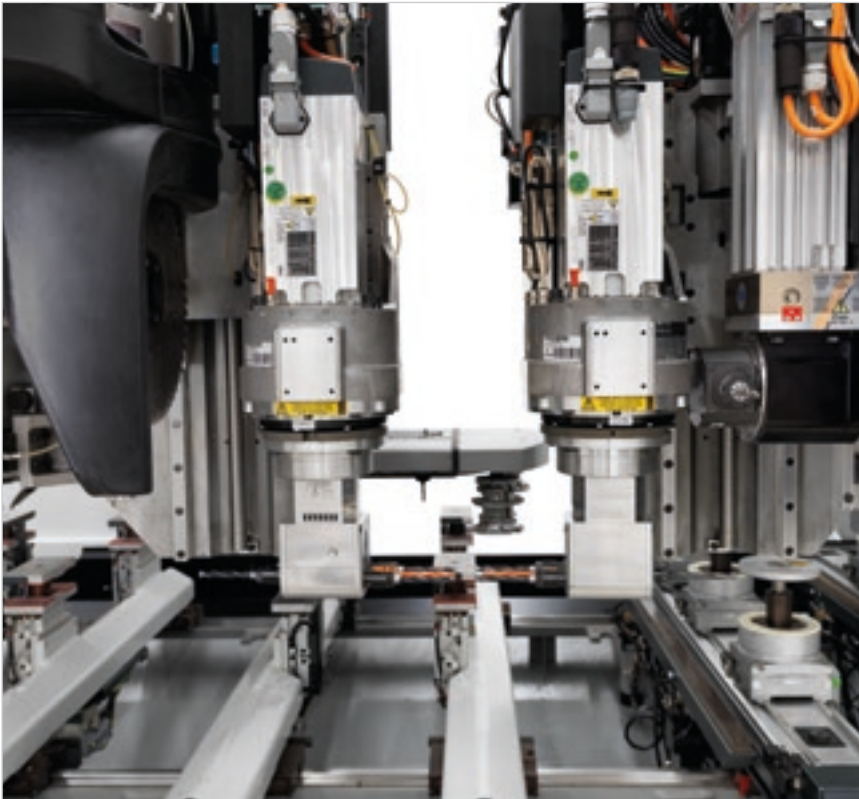


The **Modular Multilevel Buffer** is an automatic magazine (a solution exclusive to Biesse) that ensures long system autonomy. The operator can load/unload a very large number of components from a single access point during machine op-

eration. Moreover, the operator can load the components and keep the system running without supervision also after the end of his/her shift, with a resulting further increase in machine productivity.



Over 300 components manufactured during a single shift, depending on machine configuration and type of window.



Independent double beam to optimise the machining of components. It is possible to process two different components at the same time, or machine a single work piece with both units.



# Optimal clamping of the component for extremely precise processing operations

The work table has been specifically designed for door and window applications. A section of the work table is dedicated to linear processing and a second, optional one, to the manufacturing of custom windows and doors.



✓  
**Finger Clamps** always enable optimal clamping of the component. Even the shortest work piece is always secured using 2 clamps. It is possible to switch from one machining operation to the next with no need for manual intervention on the machine.

✓  
The blowers positioned on each clamp ensure that the component is held securely in place in a totally chip-free fashion, thus supporting the processing of components that have already been sanded.

✓  
The **"Safe Locker"** sensor verifies that the piece is clamped. It allows the optimisation of cycle times and prevents the risk of collisions.

✓  
Continuous run to block 40-140 mm thick components (option: 20-120 mm). High clearance under the base of the piece allows the processing of thick windows and doors also with double tools.





Components are always controlled and positioned by the numeric control to ensure maximum positioning precision and a greater ease of use for the machine.



Dedicated **EPS table** for arches, squaring and special machining operations, to be equipped with Hyperclamps or vacuum modules.



Component clamping with **Hyperclamps** or **vacuum modules**.



# Modular solutions

Machining centres for WINLINE doors and windows are modular and can be integrated into multiple cells.

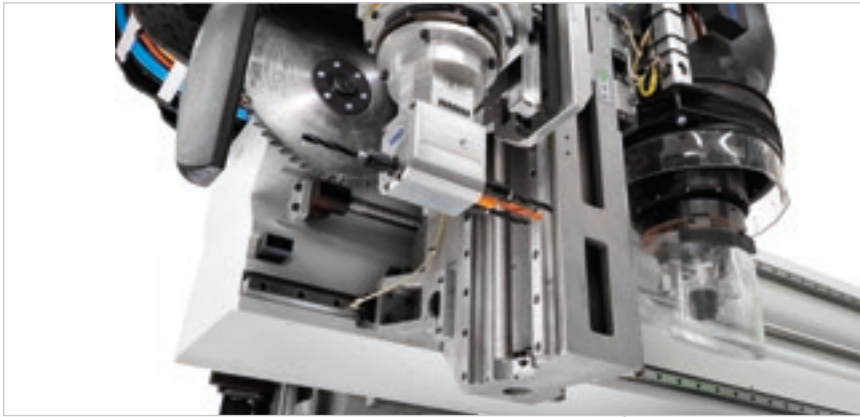
A competitive advantage that makes Biesse's solutions beneficial for large companies that focus on long-term investment.

## WINLINE

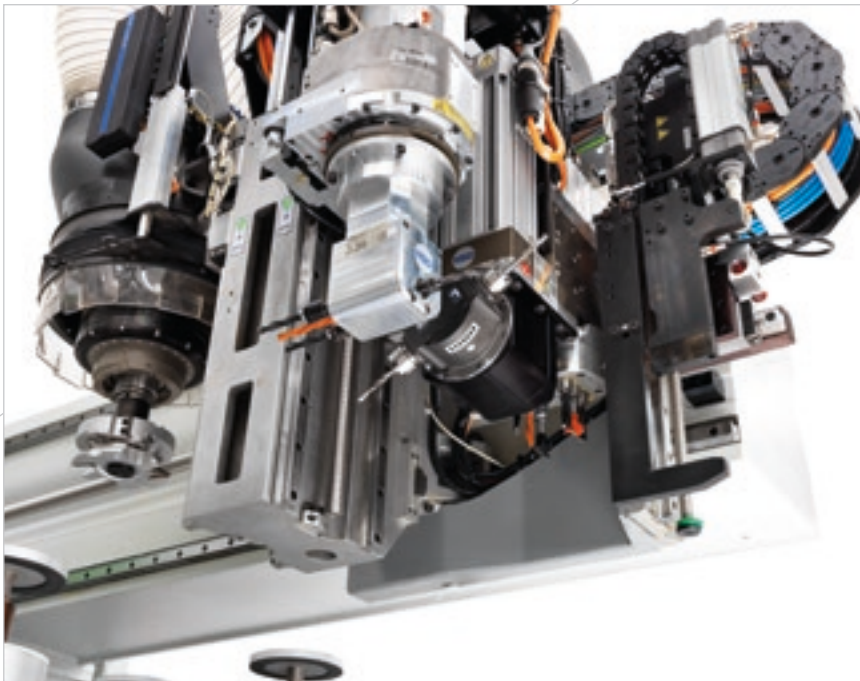
Machining without direct supervision complemented with automatic loading and unloading systems; expandable solutions that meet production types and volumes dictated by the market. A perfect combination of Biesse flexibility and Italian genius.



# Configurations



19.2 kW electrospindle  
D300 blade unit  
3+1 unit.



19.2 kW electrospindle  
FlexyWood  
3 + 1 unit.



19.2 kW electrospindle  
FlexyWood PLUS  
3+1 unit.

Other available units:

- drilling unit with 4 horizontal outlets;
- milling unit with 2 horizontal outlets.

Up to 132 aggregates  
and tools available  
at machine side.

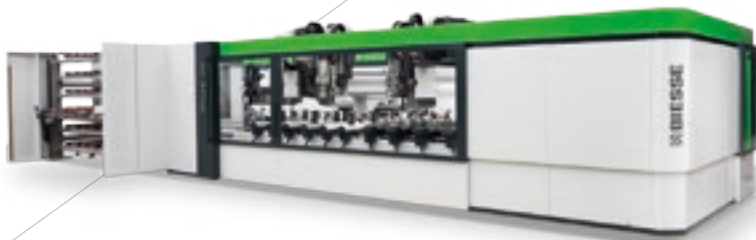


**Flexstore** 44 positions with  
distance between centres of 180 mm.



**Chain magazines** with 22 positions with  
distance between centres of 180 mm.

# So many advantages concentrated in an extremely reduced footprint



Fully enclosed working units:

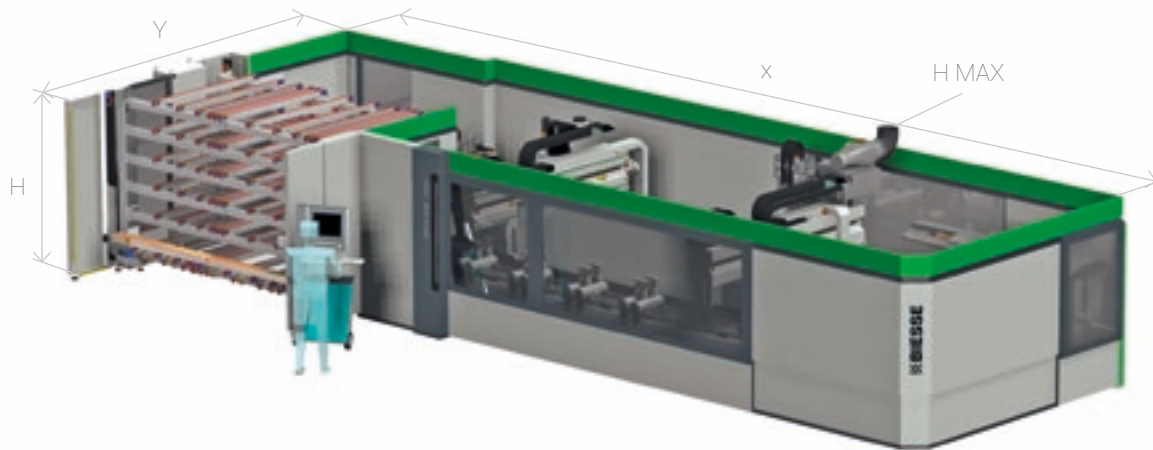
- ✓ maximum machine visibility during machining operations;
- ✓ maximum operator safety;
- ✓ clean and dust-free working environment;
- ✓ low noise levels.



LED: the user identifies the machine's status from the colour of the LED bar.



# Technical specifications



	X	Y	H	H MAX
	(mm / inch)	(mm / inch)	(mm / inch)	(mm / inch)
Winline One 3200	12500/493	5050/199	2230/88	2550/101
Winline One 4500	14500/571	5050/199	2230/88	2550/101

Maximum component machining length	140/5,5 mm/inch
Maximum component machining width	4500-6000 / 177-23.6 mm/inch
Maximum component machining thickness	200 - 260 / 7.8 - 10.2 mm/inch
X/Y/Z axis speed	100/60/25 m7min

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.

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.

A weighted sound pressure level (LpA) during machining for operator workstation on vane-pump machine Lpa=79dB(A) Lwa=96dB(A) A-weighted sound-pressure level (LpA) for operator workstation and sound power level (LwA) during machining on cam-pump machine Lwa=83dB(A) Lwa=100dB(A) K measurement uncertainty dB(A) 4.

# 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 specialised 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 customised 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 fulfilment time optimised thanks to a global distribution network with de-localised, automated warehouses.

87% ✓ of downtime machine orders fulfilled within 24 hours.

95% ✓ of orders delivered in full on time.

100 ✓ spare part staff in Italy and worldwide.

500 ✓ orders processed every day.

# Made **With** Biesse

## Sanding and profiling with a single solution

Alpilegno, a Leader in the sector of high-quality, high-performance windows and doors, performs sanding operations followed by profiling operations in its Val di Ledro (TN) manufacturing unit. Loris Cellana, an entrepreneur with long-standing experience in this sector, recalls how he evaluated machinery and system suppliers for over two years to find one that could guarantee a cutting-edge finished product: "In the end I chose Biesse". The core of the new manufacturing line is a Uniwin machine, combined with a modern 5-axis Rover C that produces doors.

"I think that Uniwin is already a good profiling machine in itself, but what was equally important to me was its interaction with other line components, such as the planer, the sanding machine and the press, and the material flow between the various machines". Components are

custom-cut and stored in a loading device by Biesse's automation programme that feeds the automatic planer. A conveyor belt moves the work pieces from the planer to the sanding machine, a Viet 334 Bottom also supplied by Biesse. From there, the components are sent to the Uniwin's loader, from which they are picked to be fully processed. 72, 80, 92 and 104 mm thicknesses in wood and wood-aluminium are processed. The magazines house up to 98 tools that are always available. Such tools can be changed in real time during machine operation thanks to a chain-operated tool-changer.

"Assembly precision enables us to avoid having to remove glue residues from the frame", explains Cellana: "in this way, surface calibration and sanding must be arranged the one after the other, to go to the pressing stage immediately after

profiling". Moreover, individual components are not painted before they are pressed, as it is customary. As a matter of fact, Cellana paints the entire frame. The compact production line occupies a footprint of only 15x15 metres; components are always handled forward and backward from the planing to the profiling machine, leaving enough space also for a walkway. "I like Biesse's solution: it is compact, the machines are efficient and, since they all come from the same supplier, it is easy to learn how to operate them", explains a visibly satisfied Cellana.

*Source: Holzkurier Austrian magazine/special Nuremberg Exhibition issue.*



<http://www.alpilegno.com>



# Biesse Group

In

1 industrial group, 4 divisions  
and 8 production sites.

How

€ 14 million p/a in R&D and 200 patents registered.

Where

30 branches and 300 agents/selected resellers.

With

80% of its customers abroad.

We

2,700 employees throughout the world.

**Biesse Group** is a multinational leader in the technology for processing wood, glass, stone, plastic and metal.

Founded in Pesaro in 1969, by Giancarlo Selci, the company has been listed on the Stock Exchange (STAR segment) since June 2001.

 **BIESSEGROUP**

 **BIESSE**

 **INTERMAC**

 **DIAMUT**

**MECHATRONICS**

