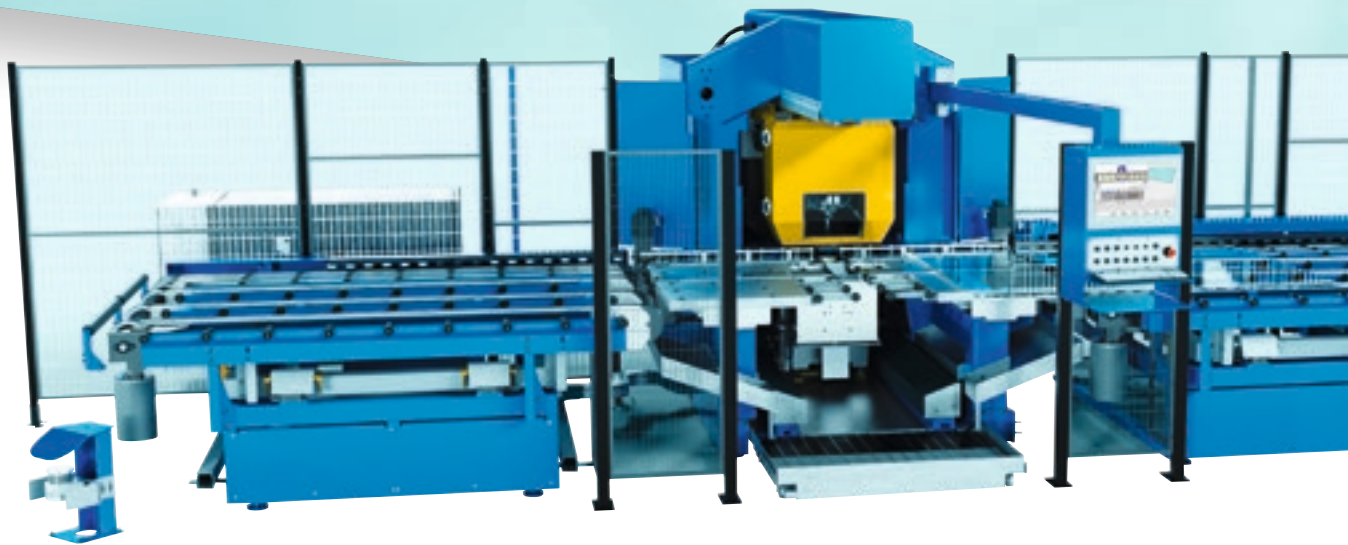


FRANCE SCA FC 16M

DRILLING



SPRINTING TOWARDS PERFECTION



The Francesca FC 16M range represents the synthesis of the most advanced technology applied by Biesse to the glass drilling and milling processes.

The machine carries out drilling, countersinking and milling operations on flat glass including those with irregular shapes. Ideal for the following Industries:



Shower enclosures
and doors



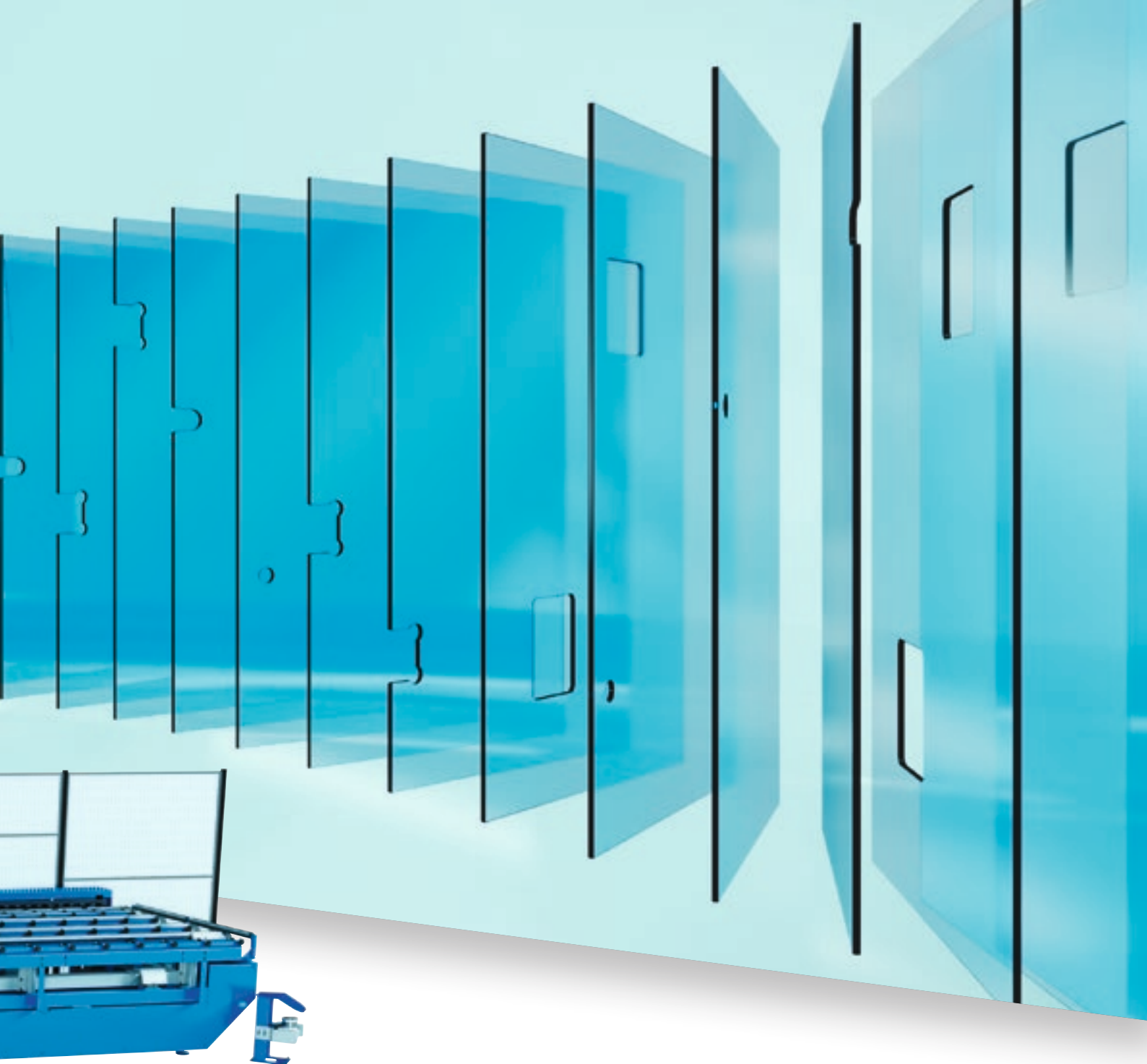
Shop windows



Balustrades



Partition walls and
interior design



Watch the video

FRANCESCA FC 16M



FINISHING QUALITY

Robust structure which ensures exceptional finishing quality and machining precision. Patented belt conveyor system with dynamic vacuum, ideal for processing Low-E glass (available on some models).



PRODUCTIVITY

Production with zero tooling times, achieved through the use of 2 maybe use the word opposing multi-spindle heads. +15% productivity courtesy of the Super Spindle option.



OPERATOR CARE

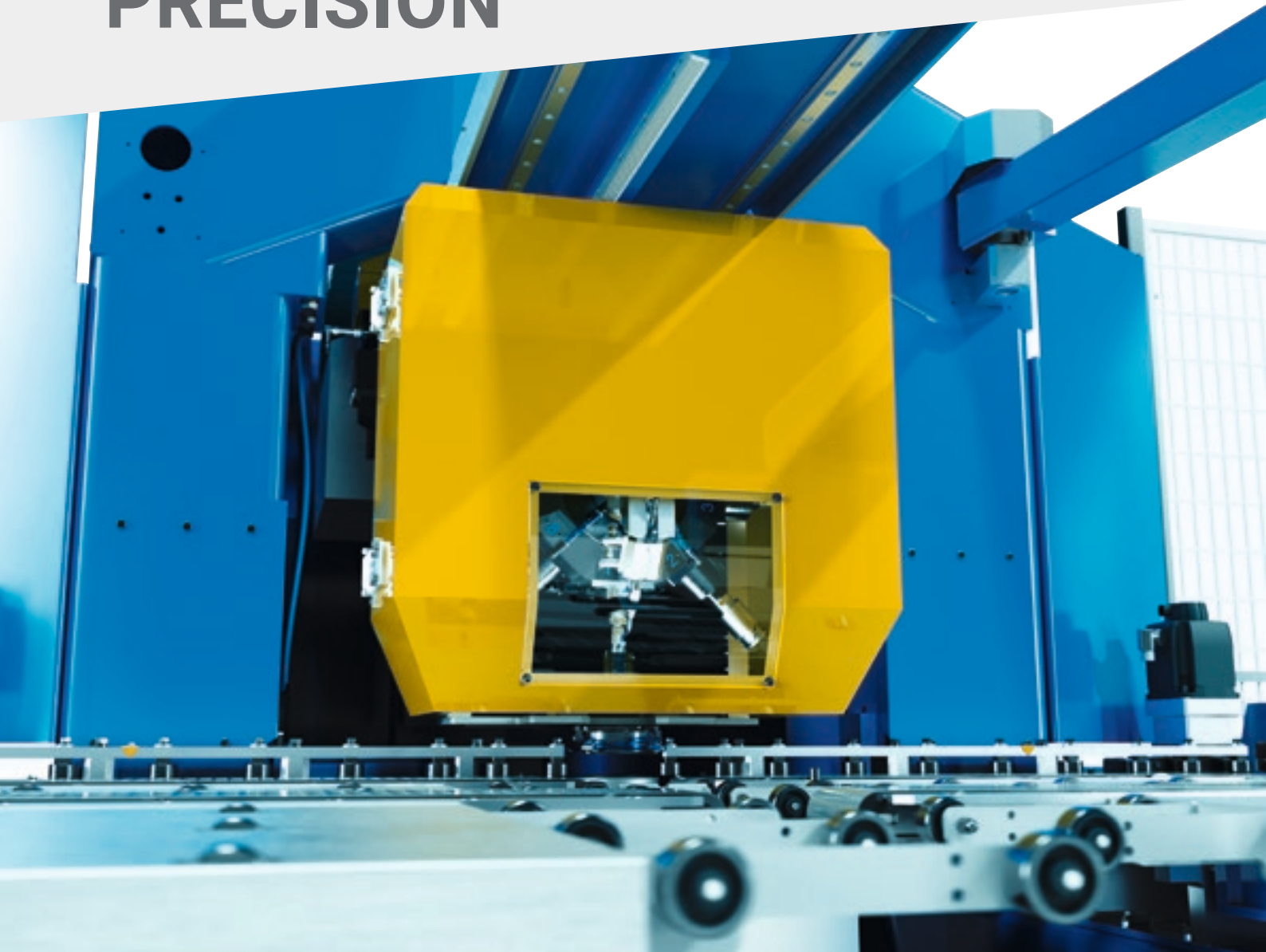
Ergonomic machine design with high-standard safety devices designed to protect the machine operator.



FLEXIBILITY

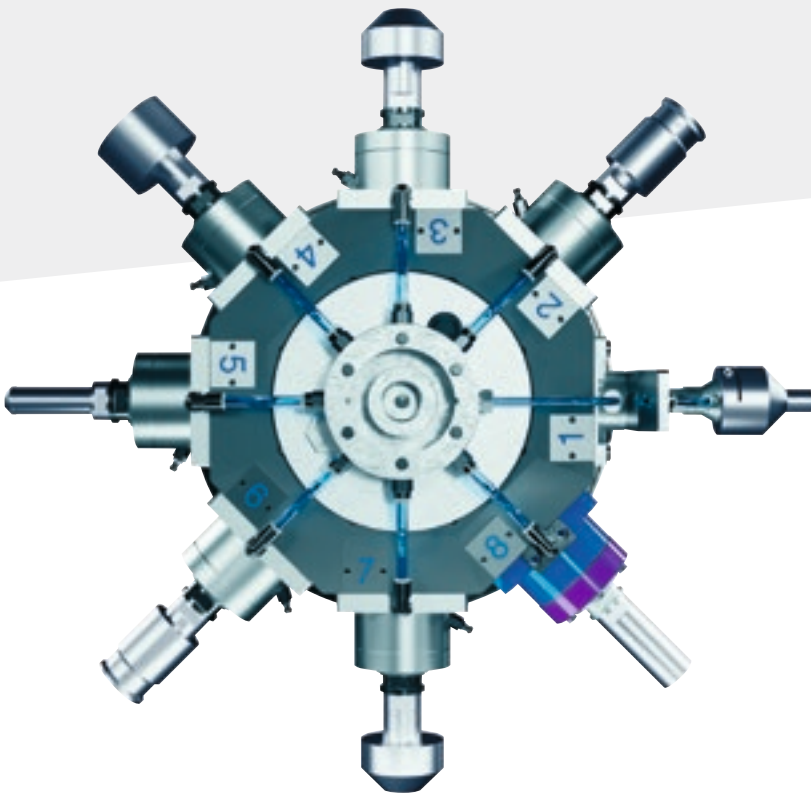
Multiple processes can be carried out, including drilling, countersinking and milling, with no size limits. Machining processes using both diamond and waterjet tools.

ROBUSTNESS AND VIBRATION SUPPRESSION FOR UNPRECEDENTED PRECISION



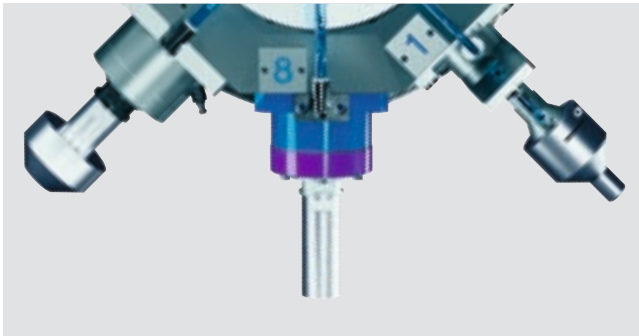
The robust structure of the machine delivers maximum stability and precision, ensuring high-quality finishing and reliability over time.

The working cycle is fully automatic, with no need for any manual adjustment. The numerical control function only requires the diameter and coordinates of the hole to be inputted by the operator: the glass feed and working strokes, the spindle advance and rotation speed, the quantity of water and the tool wear recovery are all calculated automatically.



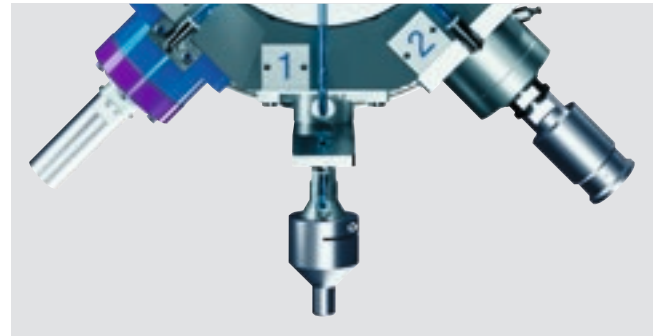
The Francesca* range combines two technologies - drilling with diamond tools and waterjet cutting - in a single machine, expanding production capacity.

(*) except for model Francesca 1250 (HO)

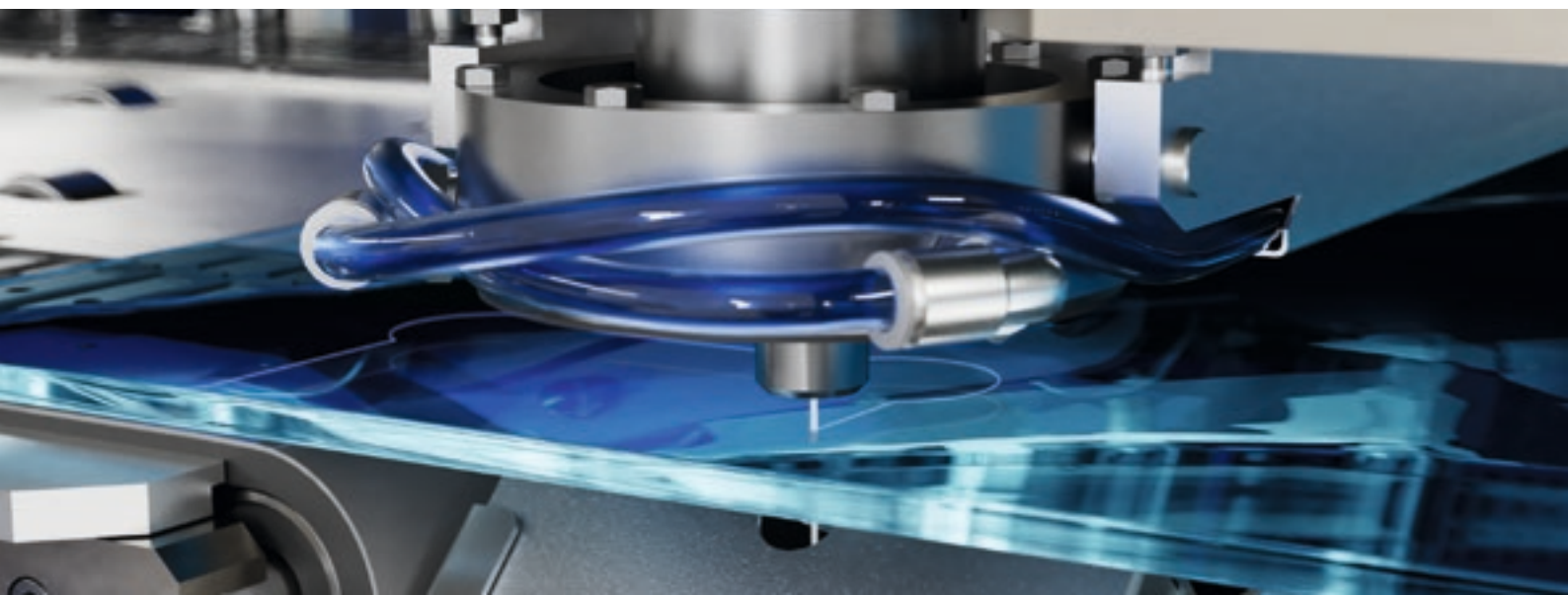


+15% productivity with the Super Spindle option. Technology designed for milling operations at speeds of up to 12,000 rpm, ensuring reduced cycle times and longer spindle life, for unrivalled finishing results.

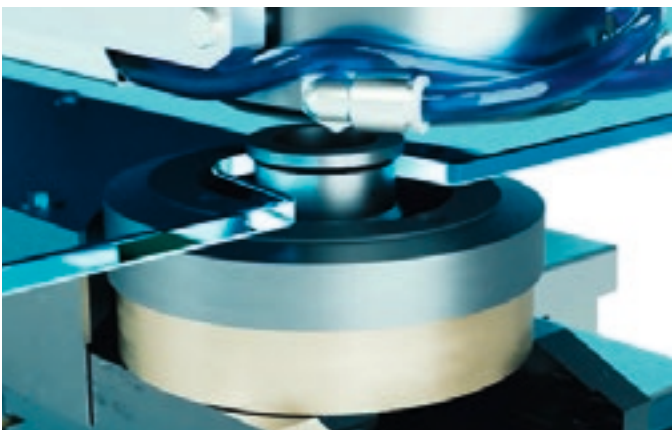
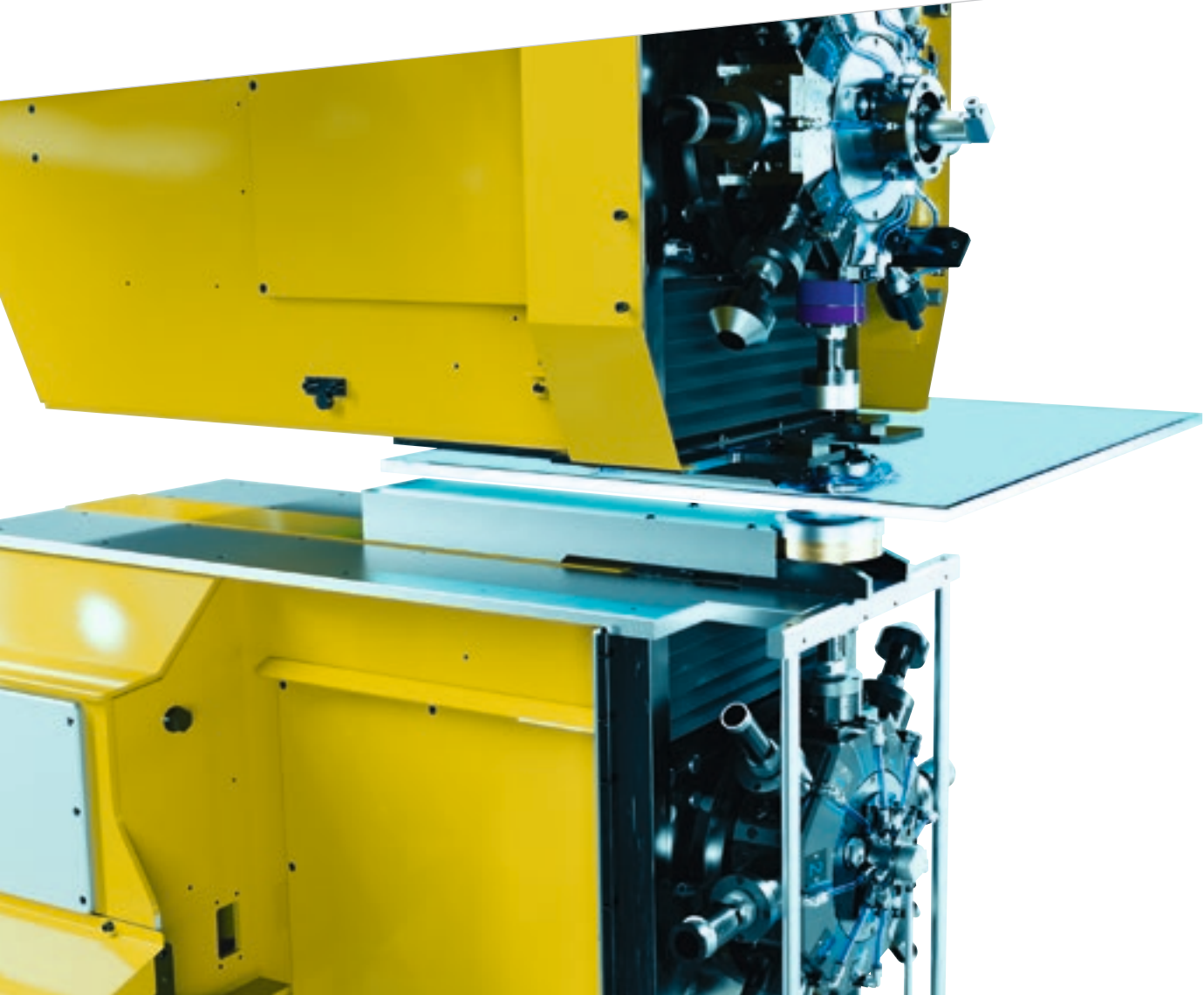
+ 40% spindle life



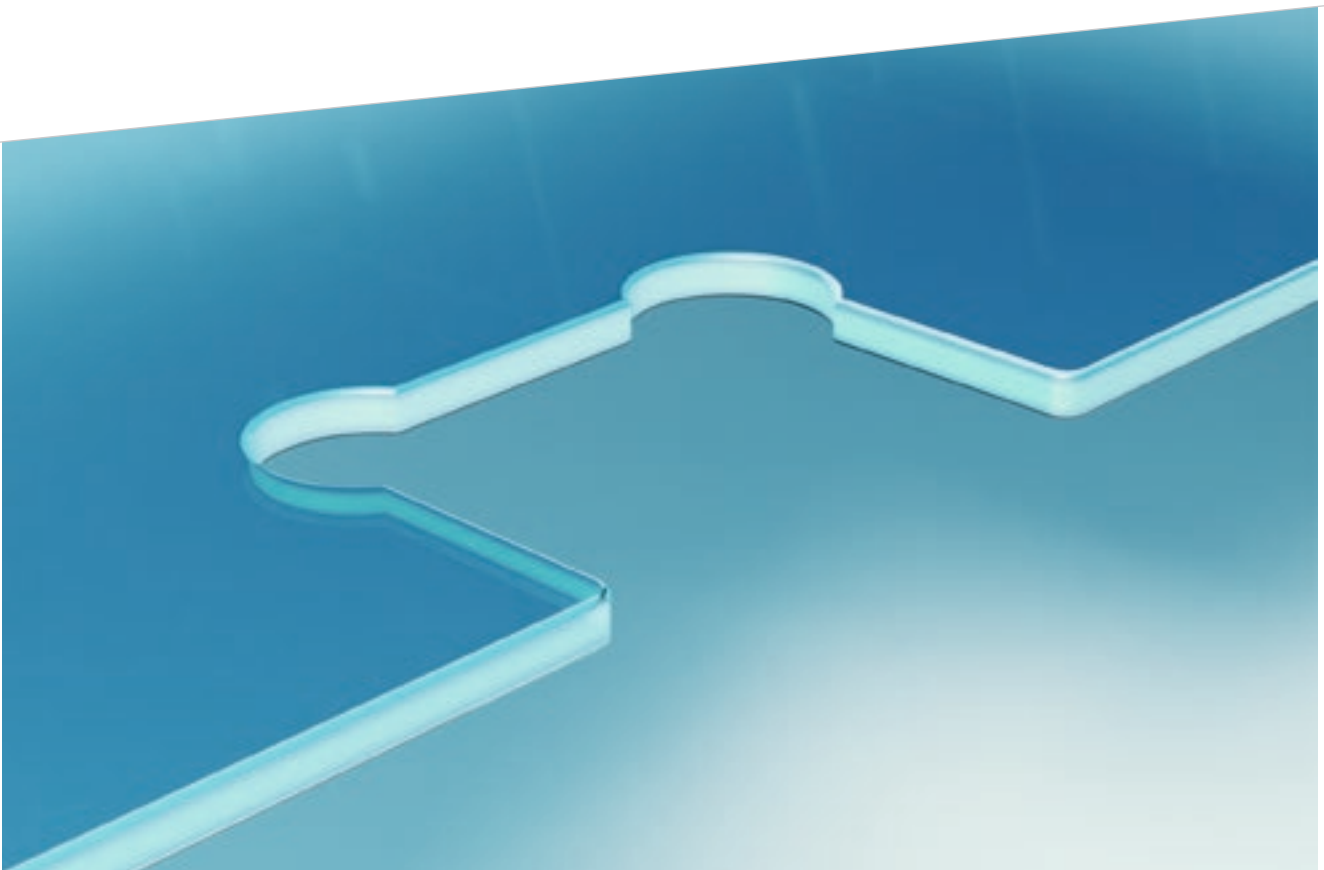
The waterjet cutting technology enables any shape to be cut, without any limitations imposed by tool diameter.



HIGH PRODUCTIVITY IN GLASS MACHINING OPERATIONS



The operating section consists of two opposing multi-spindle heads with 8 tools, ensuring fast machining times and high-quality finishing. Countersinking operations are carried out as part of a fully automatic cycle, with no manual operations.

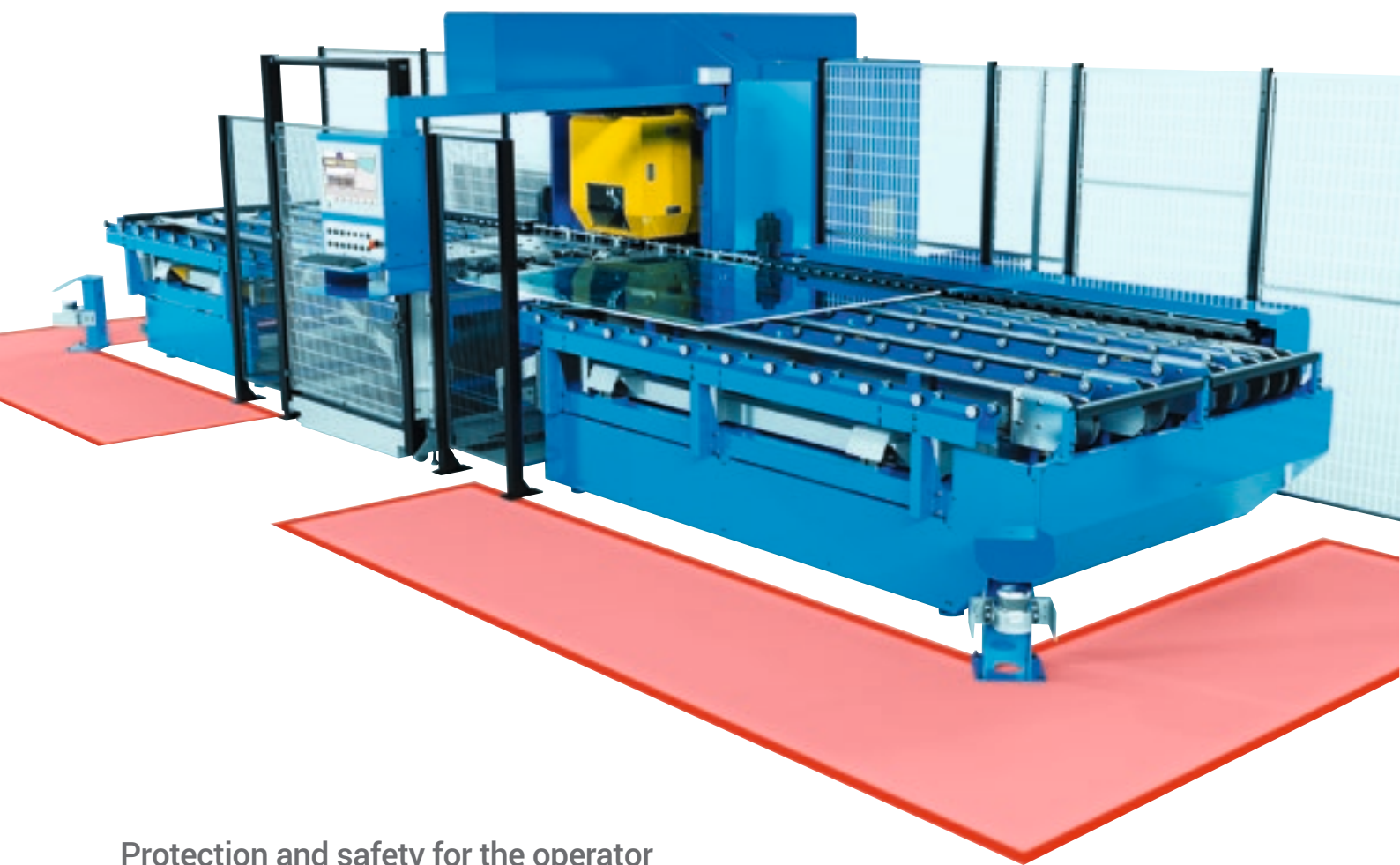


Francesca is the fastest solution for even the most complex drilling and milling operations.

- + **Reliable over time**
- + **More precise in terms of tolerances**
- + **Accurate cutting dimensions and positioning**

**THE PERFECT SOLUTION
FOR IMPROVING YOUR PERFORMANCE.**

SAFETY AND ERGONOMICS

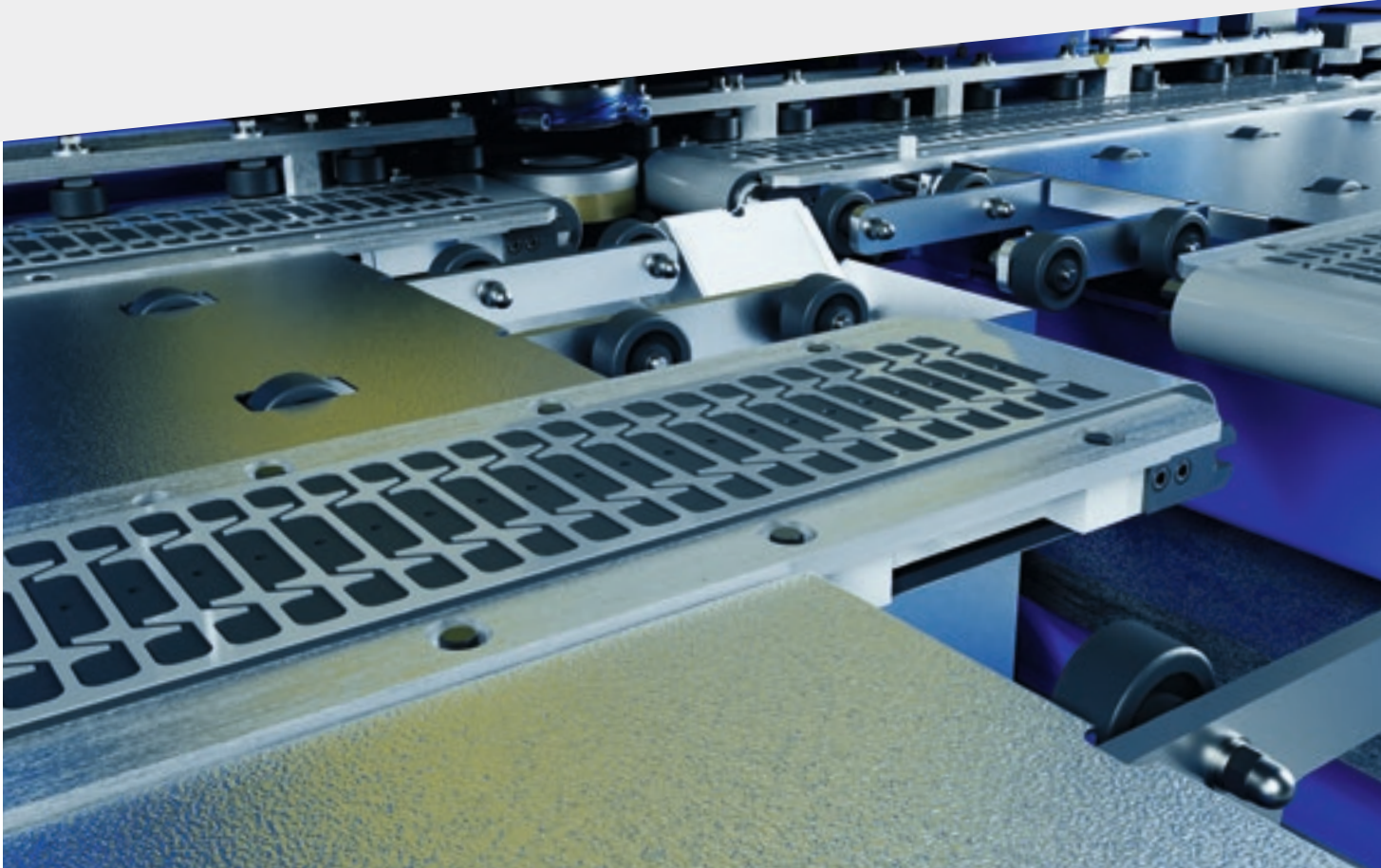


Protection and safety for the operator during the various machining phases is monitored by the the laser scanner system.* Clean working environment at all times, courtesy of the water collection tanks.

Option of processing both small and large glass sheets with extremely easy loading/unloading, even in confined spaces.

(*) Available on the 1600 WJ version.

FINISHING QUALITY

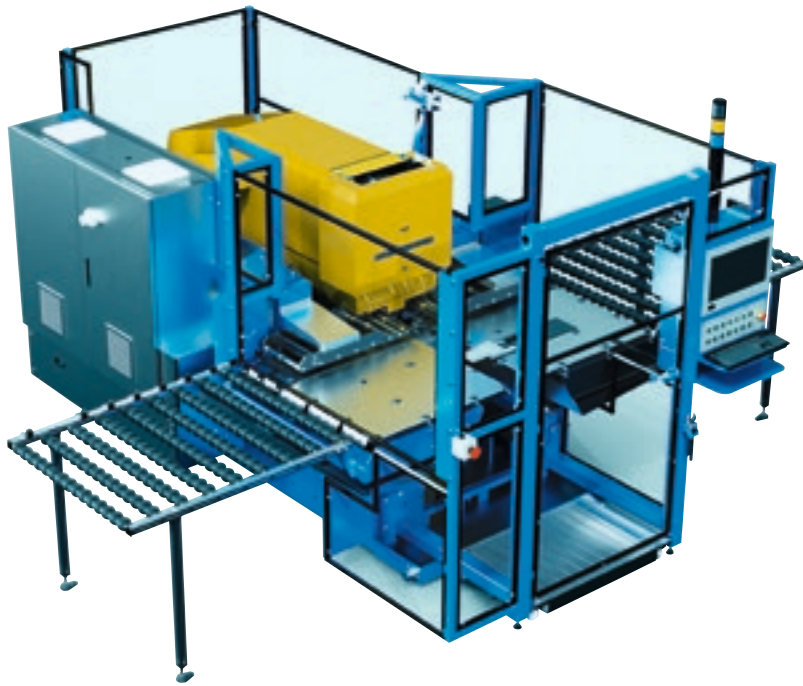


The innovative patented glass handling system, which uses belts with dynamic vacuum, makes the Francesca range totally unique within its field. The dynamic vacuum enables an unrivalled seal on the piece, during both the positioning and transfer phases and the production process itself. This solution increases the versatility of the machine, allowing it to be used to process Low-E glass.



Each multi-spindle head has a special patented system for internal and external tool cooling.

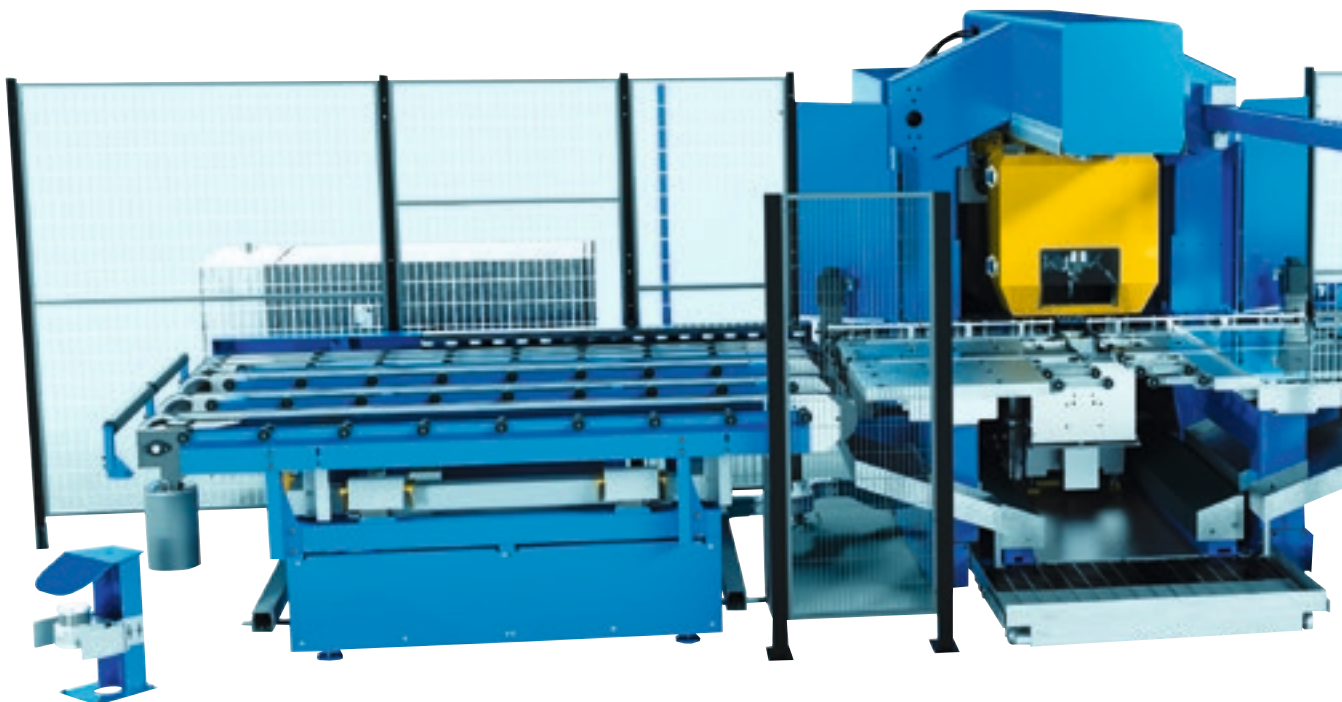
A SOLUTION FOR EVERY NEED



FRANCESCA FC 16M 1250

Productive, fast, precise

- ▣ Opposing multi-spindle heads with single Y-axis
- ▣ Rubber belts with side pressers



FRANCESCA FC 16M 1600

**Innovative, flexible,
advanced**

- ▣ Opposing multi-spindle heads with interdependent Y-axes
- ▣ Vacuum belts with side pressers

FRANCESCA FC 16M 1600 WJ

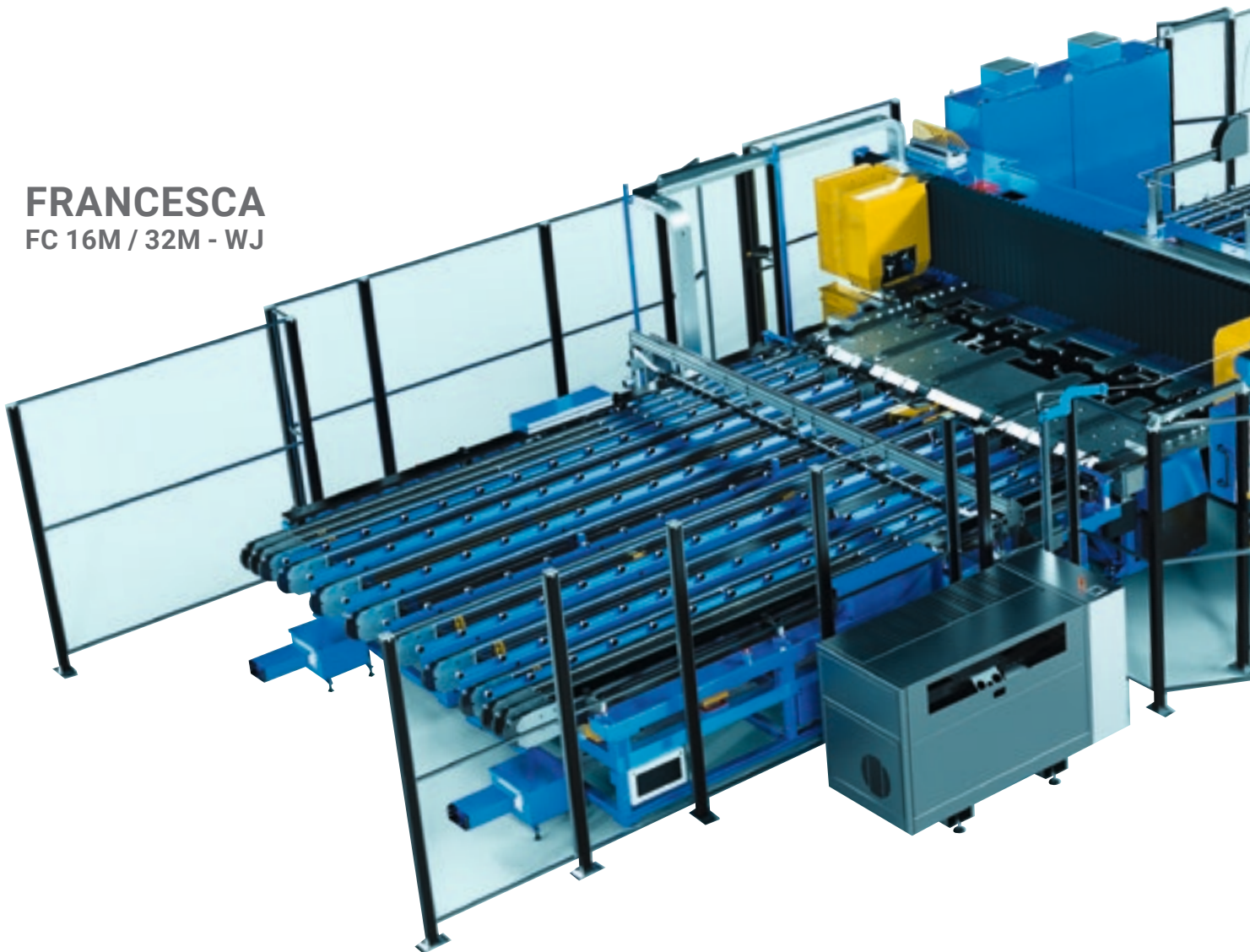
**Technological, versatile,
limitless**

- ▣ Opposing multi-spindle heads with interdependent Y-axes
- ▣ Vacuum belts with side pressers
- ▣ Waterjet

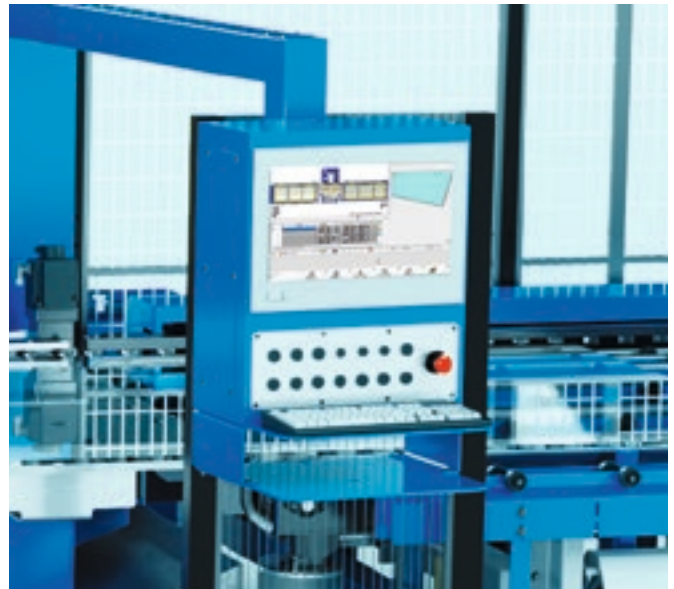
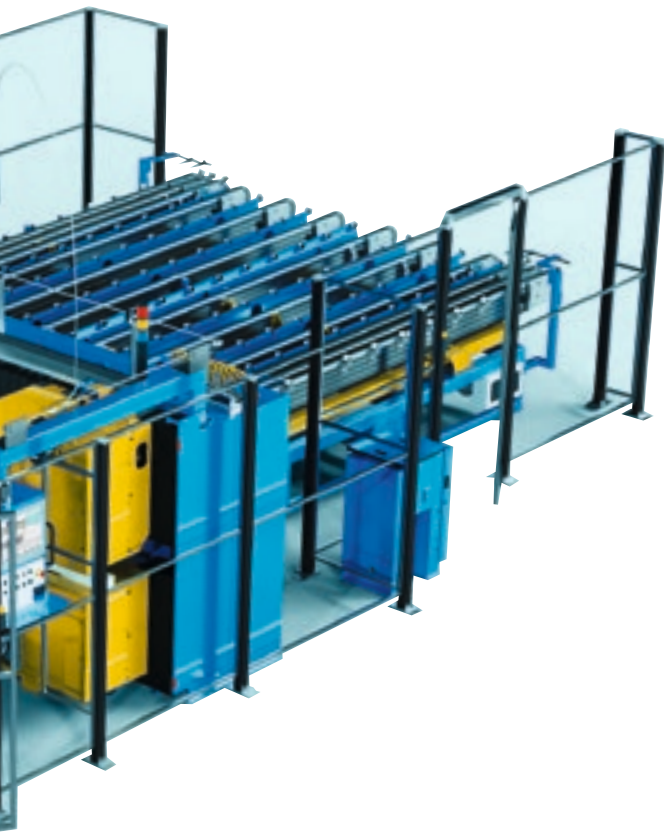
INFINITE SOLUTIONS FOR INTEGRATED LINES

Fully integrated lines to ensure a lean and efficient production flow whilst optimising factory space, maximising competitiveness.

FRANCESCA
FC 16M / 32M - WJ



EASY-TO-USE PROGRAMMING



Francesca FC uses specially designed HMI software that includes:

- ▣ Production plan
- ▣ Viewing of the operation in progress
- ▣ Creation of glass machining operations (integrated CAD/CAM)
- ▣ Modification of the machine configuration parameters
- ▣ During normal production, operator intervention is limited, as the machine automatically recognises the characteristics of the glass sheet to be processed

The Siemens numerical control solution guarantees high performance and advanced technology.

The entire system includes:

- ▣ SIMOTION, the Siemens motion control system for applications with complex motion control. This system supports the management of complex motion functions, as well as PLC functions
- ▣ Industrial keyboard - integrated touch screen
- ▣ Personal computer with USB ports
- ▣ Self-diagnostics system
- ▣ Windows operating system

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international native.

We simplify your
manufacturing
to make the power
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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Biesse world.
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