



# SCM's Smart&Human evolution at Xylexpo

Integrated solutions and complete processes for any kind of woodworking application will be on show in a completely innovative and multimedia format.

Taking centre stage will be the Digital Control Room with new Maestro connect digital services, as well as a new and improved performance MES and other new software entries.

The Grand Opening of the modernised SCM-Superfici Technology Center in Villasanta (MB), can be visited during the trade fair and offers an extensive programme of practical demonstrations.

Rho-Milano Trade Fair 21-24 May 2024 Hall 3

SCM is getting ready for the up-and-coming edition of Xylexpo with a full programme of technological and digital innovations, thanks to the level of new entries which the Italian group has in store for the entire secondary wood processing sector, and for the completely new presentation procedures.

Visitors will have a chance to explore the technologies, software and digital services which best suit their production needs in a completely new fashion, with **state-of-the-art multimedia and immersive tools** which will project Xylexpo visitors even further into the future of woodworking and into the heart of SCM's complete and limitless production range.

A Smart&Human evolution which will focus on everything new within the automated, integrated and complete processes, designed to meet the new production challenges dedicated to every field of application: furnishings and kitchens, windows and doors, flooring, timber construction, surface treatment, nautical and caravan industry, and joinery.

Integrated and advanced machines and systems will be showcased for each sector with the additional integration of Cms - an Scm Group company - technologies to machine material like glass, stone, metal, plastic and composites. Solutions aimed at making the processes **more sustainable and efficient even in batch-1 production** and at achieving bespoke products with an, as ever, outstanding quality and level of design.

Plenty of space will also be reserved for **software and digital services** designed to accompany the client at each stage of the production process.

The new digital services enabled by the IoT **Maestro connect** platform also available in the new mobile version, will be on display. The continuous exchange of information from the machine to the cloud means SCM can provide clients with **rapid access to answers and specific advice** which will assist the operators with their challenges and needs for autonomy demands, carrying out of maintenance and programming the machine and software.

On the subject of which, a fully operational version of SCM's **Digital Control Room** will be reproduced, offering the chance to discover how the data is processed to provide **proactive and advisory assistance services**, with the aim of guaranteeing the client production continuity thanks to the most evolved digital technologies and the constant dedication of SCM's Service team.

Also making its début is **SCM's updated MES**, with even better performance levels and fully adaptable to the client's needs. Some of the main advantages include easy configuration of the interfaces and the possibility of integrating with software and third-party digital services already in





the customer's possession; an opening that SCM is placing increasingly more at the centre of its digital offer thanks to the partnership programmes developed with external house software.

The **new eye-M console** for all of SCM's machines brings the bonus of ergonomics and ease of use to make the operator's work easier. It boasts modular programming and increased computing power.

The common advantages of a large number of the groups' new software include reduced expenditure and less material waste coupled with greater efficiency.

With regard to cnc machining centres and drilling solutions, SCM will present **Maestro Lab** for both office and machine CAD/CAM programming. Intuitive and dynamic, this software transforms an idea into a finished product thanks to intelligent and technologically advanced programming functions and more than 150 already integrated apps. From the office to the factory in a flash via a pleasant and fast user experience.

**Maestro active beam&wall** is the new HMI software dedicated to cnc machining centres for timber construction. It allows quick, easy and all-round control, thanks to new functions such as 3D visualisation and advanced user management as well as a **totally renewed graphic interface** aligned with that of the latest generation of software.

For the beam saw, **Maestro optiwise** is the new cutting optimization software for the **gabbiani** panel saws. Developed for programming production in the office, the software allows for the automatic generation of cutting diagrams identifying the best solution in terms of waste, time and costs based on the parameters selected by the user.

Also showcasing is the **Maestro stackwise**, a state-of-the-art solution designed to increase efficiency and productivity. The system uses advanced algorithms to analyse and optimise piece stacking during the made-to-measure cutting process, ensuring that they are strategically placed to achieve maximum efficiently, reducing scraps to a minimum and maximising return.

New entries also for edgebanding with **Maestro edgestore manager** for the centralised management of client's edges, which allows their consumption to constantly be kept under control and their location in the warehouse, as well as sharing information with the software and the company management systems.

Another important new entry will be the opening of the new **SCM-Superfici Technology Center in Villasanta (MB)**, which can be visited during the trade fair, just 30 minutes from Rho-Milano. These spaces have been extended and modernised to offer a wider range of technologies: not just the Superfici solutions for finishing and the SCM ones for sanding and pressing, but also other group technologies, to complete the clients' processes.

# **TECHNOLOGY HIGHLIGHTS**

Live streaming presentations from various SCM Technology Centers.

### **Automation systems**

**Beam saw cell** for batch 1 made up of: **flexstore elr** automatic storage, for better logistics of semi-machined pieces; single-blade **gabbiani g2** panel saw complete with, among other things, automatic panel labelling; **articulated robot** to automate the cutting and off-loading operations, reducing the need for human supervision.

The cell offers great flexibility when dealing with processes at source because it allows the finished pieces to be unloaded onto pallets on the ground and on the roller. There is also a vertical buffer in the cell, downstream of the unloading roller, which optimises the workflow efficiently separating the cutting cell from the next machining processes.





Beam saw and nesting cell for batch 1 with flexstore hp automatic storage and robot for unloading finished pieces, small pieces and scraps. Gabbiani p80 beam saw and morbidelli x200 nesting machining centre are integrated in the automatic storage which allows the panels to be stocked, labelled and loaded directly onto the worktable of both machines, protecting the most delicate surfaces. Simultaneously, the gabbiani p80 beam saw can perform stack cutting with high levels of productivity.

Cargo is a patented automatic loading and unloading system that can be integrated with the morbidelli m200 and accord 500/600 cnc machining centres for the machining of panels and doors.

The fully automated cell requires no operator supervision and is unique on the market in carrying out continuous loading and unloading of pieces in masked time, while the machine performs drilling and routing. Maximum levels of efficiency are thus achieved, avoiding manual work steps and the associated costs and unproductive time. All this with unprecedented ease of use because both the machining centre and Cargo are managed directly from the Maestro active HMI.

The morbidelli cx220 drilling and dowelling flexible cell with robot to create every kind of furniture element more efficiently, even with pieces that differ greatly from one another. The cell produces one panel per minute and up to more than 400 panels per shift with an operator in just 50 m<sup>2</sup>. It can be used with just the robot for continuous production, or with partial operator supervision.

For **windows and doors** manufacturing, the **new version of windorflex** will be on show, the automatic and technological machining cell for processing complete window frames, always guaranteeing the best accuracy, high flexibility and superior finish quality. The new machine version is featured with two handling devices for the work-pieces loading, with the aim to increase performance and productivity, and the front loading bench, to reduce the longitudinal footprint.

# Other new entries

#### Beam saw

The **gabbiani p** range expands with the new **gabbiani p95** and **gabbiani p195** panel saws, designed respectively for batch-1 machining and series production. All the options in the higher range best loved by the market regarding the SCM beam saw can be found in these new models: the Flexcut unit for side-by-side bars up to 600 mm, blade motors with a power of up to 18.5 kW and led indicators of both front and rear loading, in the presence of an lifting table.

#### Edgebanding

Making its début is the **stefani m**, an industrial edge bander representing a highly competitive investment, with advanced technological solutions for automatic set-up. Excellent machining quality is the great advantage of this edgebanding solution which has operating units with servo-assisted technologies to continually guarantee top design levels.

The offer of the **olimpic** edgebanders for artisan businesses is also renewed. At the top of the range, the **olimpic 500plus**, available with or without axes to machine 2 different radii. The hot-air gluing device guarantees an invisible line of glue for top-quality levels of design.

Also showcasing is the **olimpic 500** complete, versatile and compact edgebander, capable of performing different machining work, while always offering high standards of quality. Available both in the pneumatic and electronic set-up version, olimpic 500 allows for machining with 2 radii, each with dedicated tool, for panels with a minimum width of 60 mm.





The entry-level **olimpic 300** will also be on show, offering excellent quality and versatility for small craft businesses looking to make their mark on the market. Available in manual and automatic version, olimpic 300 is simple to use and guarantees very quick set-up times.

In the case of edgebanding, SCM also presents **new pre-melters**, transversal to the stefani and olimpic ranges: innovative glue fusion solutions with versatile devices for EVA and PUR glue.

## **Drilling**

Among the solutions on show is the **morbidelli pwx500**, a flexible, high-productivity drilling machine for fast, top-quality processing. Perfect for connected and integrated production and to achieve highly competitive standards on medium and large batches. Plant availability is 10% higher than market standards because the drilling machine can work intensively over several shifts and significantly reduces tooling changes and other operations that cause unproductive time.

#### Surface treatment

For sanding, SCM will present its exclusive multifunctional roller unit available on the dmc sd 90 model: this unit allows you to switch from calibration to sanding operations on solid wood, raw, veneered and polished panels in a matter of minutes, by simply change out the rubber coating. With this new configuration, the machine becomes more flexible, versatile and compact, and as a result, is ideal for positioning even in the narrowest spaces.

Also on display is the **dmc system with a laser engraving unit**. This innovative unit can create exclusive finishing and three-dimensional marking on wood flooring, solid wood elements, MDF panels to be veneered, fibre cement panels and solid surfaces of any length. Furthermore, the exclusive Self-Refilling technology - a distinctive bonus of SCM's laser unit - guarantees the same process parameters and the same power over time, without interrupting the workflow.

For finishing, **Superfici** will present **state-of-the-art UV processes** like an excimer treatment with exclusive **excimatt** technology for a finish on the most extensive range of finished products and material. The significant advantage is the ability to generate extra-opacity effects while being equally surprisingly smooth, without further compromises on the mechanical and chemical surface resistance.

Also being showcased is a UV LED polymerisation system with several UV monochromatic sources which, thanks to Superfici's patented system, manages to radiate at different wavelengths for greater efficiency. **UV LED matrix** guarantees all the typical advantages of LED polymerisation, ensuring comparable performances with standard UV polymerisation.

Space is also made for the **robotic sprayer** which offers excellent flexibility to machining, while keeping the end product quality level extremely high. In particular, the following will be on display: **robot maestro** for painting windows and doors, designed by Superfici starting with the arm movement of an artisan and converted into an articulated robot, now available with 8 axes to machine even larger windows and doors; **robot bravo2**, a Cartesian robot for painting panels with two 5-axis heads which guarantees an unprecedented quality, precision, reliability and delicacy, together with the speed and production continuity of an automatic spraying system.

#### **Assembly**

Showcasing for assembly work is **action e**, now available with a new loading and unloading system: an efficient aid for assembling the piece of furniture at the working height of the clamp and pushing it into the pressing area as well as for positioning the pieces of assembled furniture in vertical and transporting them to the next work area.

#### **Packaging**

The new range of **cut c** packaging solutions with cardboard will be presented for the production of just-in-time bespoke boxes and the new **pack c100** for the automatic closure of die-cut cardboard boxes using hot-melt glue.





#### **Timber construction**

Showcasing is the **oikos xs**, highly versatile cnc machining centre, ideal for companies looking for high speed and precision, combined with a small footprint and low cost. This solution is suitable for the production of **straight beams**, **prefabricated walls**, **trusses**, **roofs and blockhauses**, i.e. structural elements requiring both very fast operations such as cutting, and more complex machining such as drilling, routing, dovetails and slots for hardware, on pieces that can have a maximum length of 16 metres, a maximum width of 450 mm and a maximum thickness of 240 mm. The **dmc system xl** will be presented for the automatic sanding-calibrating of CLT panels, nowadays with three new units: bottom lower roller unit and top/bottom pad unit to machine both the upper face and the lower one of the CLT panels up to 3700 mm in width and 500 mm thick, and the transversal "piggyback" crossbelt unit, a solution developed to optimise the machine's spaces and guarantee as little space as possible being taken up. These modules are fully combinable and can be integrated with one another to suit the client's production needs, for a top-quality finished product and in line with current market demands which favour exposed walls.

# Squaring-tenoning and profiling

The squaring-tenoning and profiling technology represented by the **celaschi** models, will be showcased by its different configurations in all processes, from the throughfeed cutting of panels for the furniture industry to the profiling of inclined parquet; from the machining of insulated material to the tenoning in windows and doors systems with the new **celaschi action** double-sided tenoner.

Completing the panorama of applications for this technology will be the interactive model of the double-end tenoner **celaschi p60 for 'step' CNC machining** on solid wood panels, a machine that takes the concept of profiling to a new level.

# Joinery machines

Spotlight on the **"blade off" safety system** which will be demoed in live streaming from the new Technology Center in Villasanta. This SCM innovative solution responds to the clear requirement of minimising the intrinsic danger of using a circular saw, without limiting the productivity and the operator's creativity. The presence of the safety system is never invasive and helps to maintain high quality and productivity of operations.

Finally, at Xylexpo SCM will launch the **new portable "maker" CNC**, the mobile numerical control router, capable of autonomously creating unique and complex objects, without having to dedicate permanent space in the workshop. A new CNC designed for wood enthusiasts, craftsmen and businesses, looking for a flexible tool capable of working even on large surfaces.

**Scm Group** is a global leader in technologies for machining a wide range of materials and industrial components. Across the globe, the group's companies act as highly reliable partners to leading industries in a wide range of product sectors, from furniture to construction, automotive to aerospace, and yachting to plastic machining.

Scm Group coordinates, supports and develops a system of industrial excellence in 3 large highly specialised production centres in Italy, with a turnover of 900 million Euro, with 4,000 employees and a direct presence on all 5 continents.

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