

SCM opens the new digital Home of woodworking innovation

The Italian Group presented the latest innovations and the new Digital Control Room at Scm Headquarters in Rimini

More than 2,500 visitors from all over Europe, Asia, and North and South America, crowded the Scm Group headquarters in Rimini from 28 to 30 September to open the new Technology Center dedicated to the entire woodworking industry.

This new space has been enlarged to **4,000 square metres** and presents **technological and digital innovations** for every machining requirement in the furniture industry, windows and doors production, timber construction and bespoke joinery.

The Technology Center was created as part of a redevelopment plan involving an additional **11,000** square metres of the entire Rimini industrial site.

Other investments, totalling an increase of **20,000** square metres, were made to increase production efficiency at the Scm sites in Monza, Piacenza and Siena, as well as at the Villa Verucchio site of the controlled company Hiteco, which specialises in electromechanical components.

The new Technology Center presents itself as the **new digital home of woodworking innovation**: every detail has been designed to offer the widest range of technologies and services and provide integrated, connected, flexible, more sustainable and optimised processes at each stage of secondary wood processing.

The event was an opportunity to discover the latest solutions developed by the Group which combine the strong technological skill for the production of solutions for furniture, doors and windows, timber construction and artisan joinery with the development of software and services, to accompany the client at each stage of their production process.

Among the new entries there were some applied to the CNC machining centres: Cargo, an innovative automatic system for loading and unloading doors and panels, and the new CAD-CAM programming software, **Maestro lab**.

Cargo was presented integrated with the **morbidelli m200** pods&rails machining centre: it is a fully automated cell that requires no operator supervision, and it is unique in the market for its ability to continuously load and unload pieces in masked time while the machine performs drilling and routing operations. This exclusive solution allows for maximum efficiency by avoiding manual work phases and their associated costs and unproductive time, in addition to an unprecedented ease of use: both the machining centre and Cargo are directly managed with Maestro active HMI interface.

However, if it is true that the technology remains the heart of SCM's experience, the software and services are increasingly the guarantor element of a continuous and shared relationship with the client. **Maestro lab** is the new cutting-edge CAD/CAM programming software for both the office and machine use. Intuitive and dynamic, it allows you to easily transform an idea into a finished product, thanks to intelligent and technologically advanced programming functions and more than 150 already integrated apps. So, from the office to the factory in a flash via an enjoyable and fast user experience.

The contextualised and continuous exchange of information from the machine to the cloud thanks to the IoT **Maestro Connect** platform means SCM can provide clients with **rapid access to answers and specific advice** which will support the operators and maintenance workers with their

challenges and needs for autonomy when using, carrying out maintenance and programming the machine and software. A specific area created inside the Technology Center demonstrates how data are transformed into **bespoke assistance and advisory services** of a **proactive and predictive** nature with a view to guaranteeing the client operational continuity thanks to the most evolved digital technologies and constant attention by the SCM Service team.

SCM continues to invest in the excellence of its customer service and, for the event, opened the doors to **Autostore**, its **new automated spare parts warehouse**. This innovation has allowed SCM to increase fivefold the pick-up speed of the codes and increase the number of orders handled within 24h by 26%. All this with an energy consumption of less than 0.1 kWh per robot, confirming the Group's focus on sustainability.

Sustainability which also means ergonomics and ease of use, made available to the operators of all the SCM machines by the renewed **eye-M** control panel, which makes the operator's work easier and offers a modular programming and a higher calculation power.

OTHER TECHNOLOGICAL INNOVATIONS

Automated systems for the furniture industry

SCM's new Technology Center displayed automated and connected solutions, as well as interaction systems between humans, machines, articulated robots and AMR shuttles, software and digital services.

Gabbiani gt2 beam saw with articulated robot for automatic loading and unloading: flexible cell that optimises shifts and promotes the needs of machining that is both "batch 1" and based on large volumes. It can be used with or without the articulated robot, with automatic switch from one modality to another. All this enhanced by the new **Maestro optiwise** optimiser.

Sizing and nesting cell ideal for batch 1 with **flexstore hp** automatic storage and an **articulated robot** for unloading finished, small and discarded pieces. **Gabbiani p80** beam saw and **morbidelli x200** nesting machining centre are both integrated into the automatic warehouse that ensures storage, labelling of the panels and direct loading onto the worktable of both machines, to protect the more delicate surfaces. Simultaneously, the gabbiani p80 beam saw can also perform pack cutting with exceptional production levels.

Stefani cell E edge banding cell: it combines the many advantages of **stefani x** industrial edge bander in terms of productivity and quality with those of an automated and flexible interaction. This happens thanks to the **pickback** gantry panel return system. The **electronic touch** operating units guarantee top finishing quality even on the most delicate materials, while the new **hi-drive** kit increases the positioning speed of the units for high productivity even in batch 1 production. All this with a simple and intuitive control thanks to HMI **Maestro active edge** software.

The **morbidelli cx220 drilling and dowelling flexible cell with robot** to produce all furniture elements more efficiently, even with workpieces that differ considerably from one another. The cell produces one **panel per minute** and over **400 panels per shift**, with one operator, in 50 m2. It can be used exclusively with the robot for a continuous cycle production, or with partial operator supervision.

Beam saw

On display is the **gabbiani vsi**, vertical panel saw with independent motors for main blade and scorer with mechanical plunging designed to make horizontal and vertical cuts on different types of wood materials.

Edge banding

Making its debut is the new **Maestro edgestore manager** software for centralised control of the customer's edges: it ensures their use and position in the warehouse are always under control, as well as sharing information with software and company management systems.

A completely new entry is the **olimpic 500plus** edge bander for even higher productivity, processing solid wood lippings up to 12 mm and gluing plastic edges by using hot air technology for an invisible glue line.

Also on display is the **olimpic 500**: automatic compact edge bander. Versatile use of different kinds of glue, EVA and PUR and the machining of 2 real radii thanks to the Multiedge devices available on all the operating units including the rounding unit.

Also making its début is the **olimpic 300**: a new edge bander for small artisan businesses. It allows to perform a wide variety of processes like the 2 real radii machining with simple automatic settings, 45° chamfering and the upper and lower edge finish of the panel in differentiated mode.

Assembly

For assembly, the featured **action e** is now available with the new unloading loading system: a valuable aid for mounting the cabinet at the working height of the clamp and pushing it into the pressing area as well as vertically positioning mounted cabinets and transporting them to the next work area.

The **action p** manual loading and unloading electromechanical clamp machine is also revamped: the **new operator interface (HMI)** allows for even simpler and more intuitive operation and enables import and export of work programs, production data and general database.

Surface treatment

SCM presented the latest entries of **dmc eurosystem** and **dmc sd 90** for **sanding and calibrating**.

The main advantage of **dmc eurosystem**, highly modular automatic sanding-calibrating machine, is its capability to **perform a variety of machining work on both raw and painted panels**. At the Grand Opening the new 15" "**eye-S**" **control panel** was also on display, that allows to manage all the sanding functions directly **from the touchscreen**, as well as and the brand new **Maestro active sand** HMI which among its new functionalities is able to manage the tool storage, indicating the quantity per type of belts available in stock and giving an automatic warning when they are about to finish. The machine is equipped with the **new planetary unit**, ideal to achieve **a precise finish** on any surface, while the **GSI-200 interchangeable brushing unit** has been designed for companies looking **for maximum production flexibility**.

Making its début for dmc sd 90 is the exclusive roller unit with interchangeable rubber sleeves of different hardness. With this new configuration, the machine becomes more flexible compared to the classic two or three-unit versions, adapting to the production needs of small-medium businesses. The new unit allows to switch from calibrating operations to sanding operations of veneered and painted panels, in a matter of minutes, by simply replacing the roller's rubber sleeve with another one of a different hardness level. This leads to a considerable reduction in machine stops for classic maintenance operations. Its compact size means this sander is ideal for being positioned even in very narrow spaces, optimising production spaces.

Also on show at the **Surface Lab** in Villa Verucchio (Rn) was the new **dmc system with laser unit**. This innovative unit can create three-dimensional marking on parquet, wooden elements, mdf panels to be veneered, fibre cement panels and solid surfaces of any length. Some of the most innovative technologies to treat and finish the panel surface, include the **sergiani 3d form** press for state-of-the-art veneering of 3D panels.

Superfici specialists presented the latest trends for finishing. Standing out among the new solutions digitally illustrated we find the spraying robotic solutions.

Robot maestro for painting windows and doors. Designed from the arm movements of an artisan worker transformed into a robot, now with 8 axes for machining even larger windows and doors. The management and control systems are highly efficient, both in organization and work operations. This guarantees the best quality standards at each individual spray and on every single window and door.

Valtorta bravo2, cartesian robot for painting panels. Two 5-axe heads, precision, reliability, and delicacy combined with speed and production continuity of an automatic spraying system for unparalleled quality. Its application versatility shines thanks to the possibility of inclining and positioning the spraying guns, so as to adapt the machine to the piece's edges and structures that are not flat. After taking an automatic reading of the load, it will be possible to calculate the best spray trajectories using simple, intuitive software. No space, not even the most intricate, will be missed.

Windows and doors and solid wood

The Grand Opening was also the opportunity to discover a world preview inside the expanded factory in Rimini, the new **system 9 integrated line** for windows and doors manufacturing, which includes another absolute novelty: the **celaschi action** double-sided tenoning machine.

The SCM line stands out for the rapidity in its setup change and the extreme flexibility in the management of work-pieces with different dimensions, allowing the production **up to 200 complete windows per working shift**, even with medium-small batches.

The new **celaschi action**, in particular, allows to process two elements of different lengths simultaneously, exploiting the principle of machining with moving motors and stationary work-pieces. Among the pluses, the presence of 4 electrospindles each one served by a 6-position tool changer.

In Rimini factory was also on show **windorflex**, the new automatic machining cell for producing complete windows, designed to optimise production rhythms by maintaining high flexibility and excellent finishing.

News also for the **superset nt** automatic throughfeed moulder, now equipped with SCM's IoT platform **Maestro connect**, for an intelligent and connected production of profiles for windows, doors, stairs, beads, frames and furnishings..

Timber construction

Plenty of space was also dedicated to the latest in timber construction, presented in digital mode. These include **oikos xl+**, a new CNC machining centre for **structural columns with a maximum cross-section of 1.250x610 mm**, used in multi-storey buildings. The presence of an independent sawblade unit as well as the 6-axis operating unit, means that cuts can be performed even on the maximum thickness.

Also on show: the **oikos xs**, cnc machining centre that guarantees maximum speed of execution, precision and reduced footprint when processing **glulam or solid wood beams with a maximum cross-section of 450x240 mm**; **dmc system xl**, highly modular automatic sanding-calibrating machine, capable of **machining CLT panels** up to 3700 mm in width and 500 mm thick.

Joinery machines

The most representative SCM joinery machines were also on show, which are world leader for top of the range, unique performance and continuous innovation. Stand-alone as well as integrated solutions like those for beam saw, edgbanding and drilling of the **Smart&Human Factory integrated cell** dedicated to flexible and bespoke production from raw materials to finished furniture and enhanced by the integration with **MES** software.

The new entries include "**blade off**", the innovative SCM's safety system applied to circular saws. Thanks to the **smart sensors** it prevents accidental contact between the human body and the blade. Also in evidence: the **new on/off system and the automatic setup** with **multi-radius** tools on the trimming and edge scraping units on **me 40 and/or me 35 edge banders** controlled by the **eye-S compact** control system with **Maestro active edge** interface which guarantees high performance according to the program; **startech cn k**, compact 3-axis NC machining centre ables to carry out all types of milling, decorations, engraving, signboard creation and 3D model prototyping.

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 850 million Euro, with 4,000 employees and a direct presence on all 5 continents.

Press Office Scm Group: Alessandra Leardini – alessandra.lear dini@scmgroup.com
Tel. +39 0541 700230 - mob. +39 344 3483015.