

At the 12th Wood Construction Forum the wide range of SCM innovations for the sector

The SCM team will present the latest novelties in the OIKOS and AREA CNC machining centres range and the DMC SYSTEM XL sanding-calibrating machine.

5-6 March 2025, Lazise sul Garda (VR)

Also for 2025 SCM confirms its participation in **Forum Holzbau**, the most important global initiative dedicated to the timber construction industry, where the Italian Group is thrilled to give its contribution in terms of technology innovation and deep expertise in the sector. After the first stop in Paris, for Forum Bois Construction, the event will also arrive in **Lazise sul Garda (VR)** where the **12th Wood Construction Forum** will be held **from 5 to 6 March**.

For SCM, leading in the production of secondary woodworking technologies, it will once again be an opportunity to join the numerous key figures in the supply chain - planners, designers, builders and machinery suppliers - and present its latest innovations dedicated to the production of structural beams, CLT wall and floor elements, prefabricated walls, roofs and insulating panels.

The latest models of the OIKOS and AREA cnc machining centres' ranges will be highlighted:

Oikos XS, high productivity cnc machining centre for structural elements and prefabricated walls;

Oikos X+, cnc machining centre for intensive production of straight solid and glulam beams;

Oikos XL+, cnc machining centre for large format structural beams and columns;

Area X, cnc machining centre for machining CLT panels and curved glulam beams; and **Dmc**

System XL, highly modular sanding-calibrating machine, ideal for machining extra-large CLT panels.

OIKOS XS: speed of execution and high configurability

Oikos XS is the most versatile model in the Oikos range, cnc machining centre for timber construction ideal for companies looking for high speed and precision combined with a small footprint and low cost.

It is suitable for the production of **straight beams, prefabricated walls, trusses, roofs and blockhouses**, i.e. structural elements requiring both very fast operations such as cutting, and more complex operations such as drilling, routing, dovetails and slots for hardware, on work-pieces that can have **a maximum length of 16 m, a maximum width of 450 mm and a maximum thickness of 240 mm**.

The **speed of execution** is one of the main advantages, because the work-piece feed rates can increase **up to 3 m/sec**. Furthermore, **combined movements of the operating units** cut down unproductive time due to axis repositioning.

Oikos XS enables the **coverage of the work-piece 6 faces**. Several operating units strategically positioned within the work area, resulting in a high degree of configurability to meet every specific customer need. Another plus is the **innovative 4+1 axes revolver unit with differentiated speeds for each tool** which allows for a unique finish.

The machine also stands out for its **machining precision**, which is achieved by extremely stiff clamping system for work-piece feed, horizontal and vertical pressure rollers located close to the work area, a dynamic work-piece support system active during processing and a laser probe to realize precise dovetails.

OIKOS X+ : meeting precision and productivity

Oikos X+ is the CNC machining centre dedicated to the **high volume production of solid wood and Glulam straight beams, with a maximum cross-section of 1,250x300 mm**, ideal for the construction of roofs, residential buildings and public structures.

The new model in the Oikos range is not just an evolution, but an intelligent design choice, as it offers all the advantages of Oikos X and is enhanced by a **second independent machining unit equipped with a sawblade..** In summary, the machine is fitted with:

- a **6-axis machining unit with tool change** designed to perform all the necessary operations on structural beams, wooden boxes and CLT panels **with great flexibility and great finish quality.**
- a **5-axis machining unit with a 900-mm diameter sawblade** to guarantee **better productivity and cutting capacity** even on large beams, especially in notches which are increasingly deeper for structural applications.

Oikos X+ is the ideal solution for **carpenters working on laminated timber and looking for high productivity** and it is designed to meet customers' different demands thanks to a cutting depth up to 300 mm and a beam thickness of up to 300 mm.

Finally, the robustness of the Oikos X+ structure guarantees outstanding precision and excellent absorption of the strain produced when machining an element.

OIKOS XL+ for great eco-sustainable challenges

Oikos XL+ is the new CNC machining centre for the production of **columns and structural beams with a max. cross-section of 1,250x610 mm**. This solution has inherited all characteristics of Oikos XL, a machining centre chosen by leading companies both in Europe and North America, amplifying all its advantages, thanks to the implementation of a **second independent machining unit with a 1,150 mm diameter saw blade.**

In line with the increased expansion of multi-storey wooden buildings globally, OIKOS XL+ has been designed to overcome even the most complex challenges. The robust and adequately sized structure of the machine means **very heavy elements of up to 4 tons can be processed**, as well as very hard materials.

Flexibility is another key point, in fact any operation on any side of the work-piece can be performed with no need of repositioning, thanks to the innovative 6-axis architecture of the main machining unit. Productivity and precision are other primary requirements that are the basis of this model. The second 5-axis saw blade unit allows a **blade radius of an impressive 400 mm**. Furthermore, the use of a saw blade rather than a chainsaw aggregate means to work faster and achieve a better quality.

Another advantage is the ability to execute **cuts from bars with a maximum thickness of 610 mm**. Decisive is the machining strategy behind the Oikos XL+, which combines the second saw blade unit with the main machining unit that has a 740 mm diameter saw blade.

AREA range: high efficiency for CLT panels and curved glulam beams

Three 5-axis cnc machining centres, specific for CLT panels and curved glulam beams processing. Area, Area X and Area XL have a mobile gantry structure, protected by a full safety enclosure, and a modular composition that ensures high efficiency in the production of large format elements that are also used in the construction of public buildings and facilities such as sports centres and bridges.

Area is ideal for processing construction elements **up to 4.5 m wide and up to 50 m long.**

Area X can process CLT and panels of other materials **up to 3,600 mm wide and 360 mm thick, while the length can be up to 36 m**. The **PRO worktable** is the main feature of this model. The high level of configurability is provided by the availability of five different bases (from 16,000 to 36,000 mm) that can be equipped with automatic systems for work-piece referencing and clamping, together with innovative systems for cleaning the work area.

Area XL is the giant of the range, specifically designed for the industrial production of large format panels and CLT elements **up to 3,600x400 mm**, thanks to a powerful and high-performance machining head unit - 63 kW in continuous operation - that allows heavy duty stock removal with extreme ease, even using very heavy tools.

High productivity rates can be achieved by equipping the machine with a **second machining head unit**, capable of executing several operations simultaneously. Besides, the integration into automated CLT panels production systems is possible by means of a special roller worktable. A wide choice of tools and aggregates, **up to 60 tool stations in total**, allows to carry out any type of project by choosing the right configuration. Optional auxiliary units allow transversal throughfeed-drilling even on the maximum panel size.

Moreover, increased efficiency and reliability are guaranteed by **work-piece handling and referencing systems** and **innovative cleaning systems**.

All SCM cnc machining centres for timber construction are equipped with **Maestro beam&wall**, the proprietary software compatible with the most popular design CADs in the industry.

Programming freedom is guaranteed, as Maestro beam&wall allows programming both in the office using a PC and directly on the machine from the upgraded **eye-M top plus** operator console, complete with **Maestro active beam&wall**, the new human-machine interface offering a simple, intuitive control and an optimisation of the production flow.

DMC SYSTEM XL: built bigger to work harder

The SCM project with **Dmc System XL**, automatic calibrating-sanding specifically designed for timber construction industry, continue with new units in addition to those already available (roller, pad and crossbelt units) to further enrich the machine by enabling **to process both top and bottom face** of CLT panels up to 3.700 mm wide and 500 mm thick.

These new modules (**bottom roller unit, top/bottom pad unit and “piggyback” crossbelt unit at the machine outfeed**) can be **fully combined and integrated with each other** according to the customer's production requirements, by offering very high **configuration versatility** (a distinctive plus of Dmc System XL) and unification of components and common parts **to optimize operating costs**.

The solid steel structure is conceived to last long and withstand the most intense machining, by granting zero-vibration. Furthermore, the automatic sanding-calibrating machine has been developed to **make the operator's maintenance work easy, fast and always safe**.

Energy saving is a key issue: the machine has been specifically engineered with an optimized design and technological solution **for minimum compressed air consumption**.

Even this solution, as well as all SCM sanding technological offer, is aimed at **improving the surface finishing** and increase the value of the finished product. Reflecting the latest market trends in having visible CLT walls and a product that is as natural as possible (without resorting to additional surface treatments).

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 production sectors, from furniture to construction, automotive to aerospace, and marine 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 about 4,000 employees and a direct presence in all 5 continents.

Press Office:

Alessandra Leardini – alessandra.leardini@scmgroup.com Tel. +39 0541 700230 - mob. +39 344 3483015.