

SCM at DACH+HOLZ International 2024: expertise and innovation for the timber construction industry

The stars of the SCM stand will be the OIKOS XS cnc machining centre and the new Maestro active beam&wall HMI software.

*Stuttgart, 5-8 March 2024
Hall 10, stand 421*

SCM returns to DACH+HOLZ International with state-of-the-art innovations and a rich programme of technical demonstrations and insights dedicated to the timber construction industry.

The result of continuous investment in research and development and the Italian Group's constant focus on the latest requirements of the green building industry will be on show in an exhibition space dedicated to high technology and the latest trends in the sector (**Hall 10, Stand 421**).

Prominent on the stand will be the **OIKOS XS** cnc machining centre, which visitors to the fair will be able to see in action in all its potential, thanks to demos dedicated to the production of specific structural elements: different types of timber frame walls, roof portions, structural beams and elements with X-fix connection.

Other demos will be dedicated to software, to experience live the advantages offered by the new **Maestro active beam&wall HMI**, transversal to all models of the Oikos and Area ranges of CNC machining centres for timber construction.

The Stuttgart event will also be an opportunity to take a closer look at the entire SCM range for the timber construction industry: in a cosy **SCM Arena**, presentations will be given on the other new additions to the wide range of cnc solutions such as **OIKOS XL+** and **DMC SYSTEM XL**, automatic sanding-calibrating machine, as well as discovering the latest trends together with green building experts.

TECHNOLOGY HIGHLIGHTS

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 pieces that can have a maximum **length of 16 metres, 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.

New HMI Maestro active beam&wall for quick and easy all-round control

Maestro active beam&wall is the new human-machine interface software dedicated to CNC machining centres for timber construction, which offers numerous functions in a simple and fast way:

Multi-project: it allows the production of elements of the same section but which are part of different projects to be optimised on the same raw bars, in order to minimise material waste. The optimisation process is fully automatic.

3D visualisation: possibility of exploring the workpiece and taking measurements. On the 3D element, the tool paths of the machining units are traced in real-time.

Complete job management: management of routine maintenance, machine alarms, work shifts, printing of labels and creation of production reports... these are just some of the functions that the software makes available to the customer.

Advanced user management: different levels of authorisation can be enabled for each machine operator depending on their capabilities, in order to protect the machining centre from incorrect manipulation.

The **new version of the HMI software** is characterised by a **totally renewed graphic interface** aligned with that of the latest generation of software. Maestro active beam&wall is based on Maestro active, the HMI software adopted by the entire SCM Group for complete job order management.

Last but not least, the presence of the new **eye-M top plus** operator console compatible with all models in the Area and Oikos ranges. On the same console, upon request, the Maestro beam&wall programming software can also be installed, closely connected to the HMI software. The possibility of using Maestro beam&wall **both on a PC in the office and on the operator console, i.e. directly on the machine even for the programming phase**, is an important advantage for companies that reckon on flexibility of use to increase their productivity.

OTHER NEW PRODUCTS PRESENTED IN DIGITAL MODE

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 1250x610 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 1150 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.

DMC SYSTEM XL: built bigger to work harder

Two years after the launch of DMC SYSTEM XL, automatic sanding-calibrating machine for timber construction sector, with its firsts three modules (roller, pad and crossbelt units), the machine has been further enriched with new units that enable **to process both top and bottom face** of CLT panels up to 3.700 mm wide and 500 mm thick.

New features presented at Dach+Holz 2024 are: **bottom roller unit, top/bottom pad unit and “piggyback” crossbelt unit**, modules that 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 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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