

OIKOS – AREA

Innovative technology for machining wooden elements for the building industry

The market of wooden buildings is constantly growing not only in Europe but in the rest of the world. Timber construction offers many advantages not only **economic but, most important, in terms of ecology and sustainability**.

Scm has placed its decade's worth of experience in the design and production of highly evolved and flexible machining centres at the service of the building industry, to create a new standard for processing wooden structural beams and modular wall elements.

As a result, two important projects are born: **OIKOS, for machining structural beams and X-lam/CLT wall panels and AREA for machining walls, insulating panels and curved beams**. Two different machines that share the same design concept proper of all Scm machining centres.

Innovation

Both machining centres are fitted with **machining units specifically designed to maximise performance in terms of dimensions, dynamics and power**.

Six axes on the OIKOS machining unit to obtain a stiffer machine configuration and ensure high performance and productivity.

The AREA electrospindle features power up to 30 kW, to perform any type of operation with maximum stiffness in any condition and using: a sawblade up to 1020 mm in diameter, a chainsaw with a cutting length of 480 mm. Maximum worktable dimensions are **4,5 m in width and 50 m in length**.

Precision

Oikos consolidates the **technology of 6-work piece-sides machining without having to turn over or reposition the beams with a maximum width of 1250 mm, thickness of 300 mm and length of 19 m**. This improves precision as the beam can go directly from the machine to the site without the need for any manual adjustment.

Area, thanks to the **innovative solutions employed in the supporting structure, allows extremely precise machining on elements longer than 50 metres**.

Flexibility

The unique configuration of Oikos married to the continuous development, allow the machine to be used for operations on special products, such as cutting **insulating or composite panels and threading lamellar beams**.

The new solutions developed for the Area worktable allow the complete machining not only of walls, but also of curved beams and thin panels. The former are processed on a suction cups-worktable whilst the latter use aluminium multifunction modules that can be integrated in the worktable itself.

Simple and quick to use

The success of machines for timber construction depends also by the effectiveness of the software that is developed and constantly updated internally to ensure it is in line with the design standards of wooden constructions.

Scm developed then **Maestro Beam&Wall** software, in order to achieve maximum speed and ease of use: **a single program that allows access to the programming, program execution and tool management environments**.

The Nesting function to process wall panels is now also available for Oikos: Maestro Beam&Wall can import .btl format files generated for nesting machining, in order to optimise the use of the material and reduce waste.

Order profitability

As with all Scm machining centres, Area and Oikos are both available with the **simulation software** included in Maestro Beam&Wall. The simulator makes it possible to test the programs in advance on PC and visualize the operations that will be performed during production, with obvious benefits for the customer:

- to eliminate collision risks, errors and downtime
- to calculate time and cost production, resulting in easy determination of the yield of acquired orders.