

## OIKOS 12: reasons of a success

Always more advanced performances, high scalability, simple and dynamic programming and configuration tools: these are only some of the characteristics of OPEN-30, the software for OPENcontrol CNC family designed to manage six axis 3D machines. These innovative, high technological functions are exactly what convinced CTC-Routech to use once again the OSAI brand controls on OIKOS 12, their last highly technological machining center.



### The company

CTC-Routech is a company controlled by SCM Group. Located in Sinalunga (Siena - IT), Routech is specialized in machining centers for woodworking industry and it is a company made by about fifty employees. This dimensioning is the result of a precise strategical choice made to maintain that flexibility and that dynamism essential to develop high quality products in a short time.

From the operating point of view, Routech is a technological unit dealing with design, construction and service for a specific product type addressed to high technology niche works, which can be, for example, the manufacturing of laminated wooden beams for civil purpose.

### OSAI choice

OSAI is a Prima Electro brand, a company controlled by PRIMA INDUSTRIE S.p.A., which designs, produces and sells industrial electronics, being at present one of the main player in the Numerical Control Italian market.

The choice of OSAI made by CTC-Routech, has been identified during the context of design and creation of OIKOS 12, the new compact machining center which gives the perfect technological solution for the manufacturing of wooden beams and elements for modular walls.

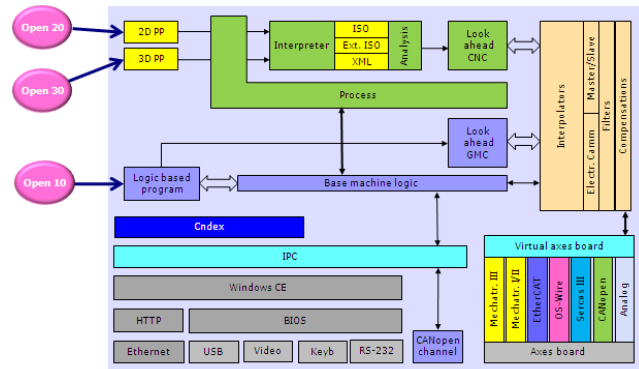
This specific machining center is equipped with six axis kinematic configuration, with three linear axes and three rotating axes. *OPENcontrol* has been chosen in order to satisfy this type of need, being a CNC solution designed for machine tools management with different types of rotating heads, where advanced TCP (Tool Center Point), spline functions, plane rotations and axes virtualizations are requested.

The possibility to manage complex 3D machining centers represented the additional value of this product, which led to its installation on CTC-Routech OIKOS 12.

Beside the possibility to manage six axes kinematics interpolated with TCP, among the main utilities offered, *OPENcontrol* CNCs use very simple programming and dynamic configuration tools, allowing the development of the automation project in a way even faster than the one of the previous CNC generations. It must be also taken into account the high processing capacity, which allowed to easily supporting the software complexity.

*OPENcontrol* CNC SW is also available in virtualized PC version, which has been used with the exclusive machine simulation software. The presence of the new simulator, which allows executing the CNC software on PC without additional hardware, always provides a testing ambient very useful during programming phase.

Finally, OSAI technicians and engineers played an essential role to transform this collaboration into a successful partnership, as highlighted by Eng. Tiezzi (CTC-Routech Technical Office Manager): “OSAI gave us the possibility to bring a functioning prototype to the trade show within the end of January when, before Christmas break, the machine was still in working phase. All this became possible both for the extreme flexibility and practicality of use of the new control, both for the technical support given by OSAI, whose staff supported our technicians with great passion and excellent results”.



### The developments

The opportunities offered by OSAI also refers to projects other than OIKOS; for what concerns other CTC-Routech products, which can constitute an additional development of the adopted solution, the company is installing the new numerical control also on the new machine RX 40 type and further developments are under evaluation.