

SCM presents Windorflex, the new machining cell for producing windows and doors

Nowadays, **design** and **eco-sustainability** are the two main trends defining wooden windows production.

The design dictates windows' finish quality and shape, while the eco-sustainability mainly involves the way as they are manufactured.

As concerns the execution of wooden windows, the level of perceived finish quality is steadily growing. Therefore, in order to **optimise production rates and flexibility**, it is essential paying significant attention to the machine constructive features.

Being a technology partner of the world's leading window and door manufacturers for seventy years gives SCM the opportunity to continuously listen to the customer's most detailed requirements and allows to constantly come up with advanced responses.

Based on these prerogatives, SCM designed **windorflex**, the new machining cell specifically for the production of windows and doors, presented at Ligna with a 3D app that reveals all its main advantages.

According to the *"Spread your wings with Windorflex & future-proof your windows production"* campaign, the machine is an innovative and high-tech solution for producing window frames, regardless of the type.

Windorflex has a fixed gantry structure that enables for high machining speeds whilst ensuring the **best accuracy**.

The configurability of the machining units with 4 and 5-axis electrospindles, allows performing all the necessary operations for the **production of complete windows**. The alternate use of the two routing units reduces the cycle time: while one unit is working, the other performs the tool change in masked time.

The innovative automatic worktable is equipped with dedicated clamps for the constant holding of the work-pieces. It is possible to process **from 1 to 4 work-pieces in sequence**. The worktable modularity allows managing three work-piece lengths: 3500, 4500, 6000 mm. The work-piece repositioning, from the internal side machining to the external one, is direct between the clamps, without needing additional devices, to ensure **excellent finish quality**.

Another advantage is the **automatic work-pieces loading/unloading systems** that enable the machine to work autonomously, without the continuous input of the operator. These systems are available in two solutions: with loading/unloading bench or with an anthropomorphous robot that picks up the rough elements and unloads the finished work-pieces on special trolleys.

The exclusive **Maestro active windoor** software, specifically developed for the control and the programming of Windorflex, is capable of meeting any demands related to windows and doors production thanks also to **Maestro connect**, the SCM IoT system.