



going soft on edges

Stefani's newly developed soft-forming range won a coveted Xylexpo prize for its profile edge processing technology. We asked Stefani's edgebanding product manager, Johnny De Leonardis to point up the key features of the range.

With its new soft-forming process, formally introduced to the furniture manufacturing market at Xylexpo 2016, SCM Group member, Stefani, has brought the manufacturing of J-profiles and customised panel edges within reach of the small to medium-sized workshop. Remarkably, Stefani's engineers have achieved this with a machine of just 11 metres in length that offers switching between any of up to four different profiles in under half an hour - or five to ten minutes if you opt for the automatic version.

"We have worked closely with leading European companies, including Rehau and MKT, testing materials in order to find the best possible combinations of material, thickness and decoration," commented Stefani's edgebanding product manager, Johnny De Leonardis. "For the processing of J-profiles with edge thicknesses between 0.5 and 0.8mm, which are the most difficult to achieve, we complete the whole process in a machine of just 11 metres. The 11-metre machine will also

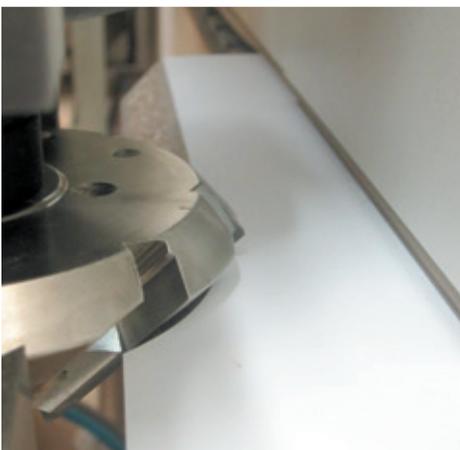
process 60 and 45-degree profiles as well as step profiles [+90 degree step or -90 degree step] with an edge thickness of 1.5-2mm and the process feed speed with either chipboard or MDF is 20-25m/min."

There are four versions of the machine, all of which facilitate the use of either EVA or PU adhesive and melamine tapes, PVC, PP, ABS tapes and both soft and hard veneer with a maximum edge thickness of 3mm. "For the highest quality results, the materials must have a specific formulation, suitable for application to complex surfaces," says Johnny. "We have developed a new set of parameters and specific processing steps that enables soft-forming of materials that are rigid and not easily deformed, such as ABS and PP.

"First, we create the shape with milling units. We can fit up to four profiles in the milling section. These can be semi-automatic tools with quick button release, which use HSK technology, or selection can be fully automatic with NC vertical and horizontal positioning.



Johnny De Leonardis



Centre Left: The pressure zone is set up with a combination of air-cooled pads and rollers, which is different for each profile. Up to 4 profiles can be produced and changeover can be manual or automatic.

Bottom Left: Different profiles can be achieved by using the same profiling units thanks to HSK quick release tools.

"Glue is applied to the shaped surface in a pressure zone, which can be anything from 1.5 metres to 4.5 metres, depending on the thickness of the edge to be applied and the shape. The pressure zone can be fitted with up to four different shapes and it will work with both EVA and PUR adhesive. The big advantage of the Stefani system is that the pressure zone required for PUR application is only 1.5 metres in length."

The edges and chamfers are finished in the finishing section of the machine before finishing of the remaining sides. "Depending on the shape being machined, the position of the finishing units - the fine trimming, corner rounding and edge-scraping units - can be positioned manually or automatically. We use a standard corner rounding unit with either a 45 degree profile or a tilted profile

of up to 60 degrees, or, in the case of complex shapes like the J-shape or the step, we use NC corner rounding."

With its Solution, Evolution One, Evolution SSB and Evolution SB soft-forming machines, Stefani has taken tried and tested technology, brought it right up to the minute and done so in a relatively compact machine that will enable you to bring trend-setting panel edge design for fascias, drawers, tops and boxes in house for a lot less than you might think. And once you have a Stefani soft-former, Johnny confirms it's a simple matter of adding tools to the various zones if you want to change the shapes you can process in line with changing fashion. No wonder Stefani won the Xylexpo XIA Grand Jury prize in May.

To find out more about the range contact SCM GB on 0115 977 0044.