

Processing recommendations¹⁾

Benefit from our experience when machining and processing lisocore® lightweight material.

General information

lisocore® lightweight panels can be machined and processed on all conventional machining systems, such as panel saws, vertical and horizontal panel-sizing saws and machining centres.

When machining the panels, chip debris can build up in the core structure area. This must be removed before processing any further!

Panel cutting

Thin saw blades with large corner and cutting angles ("high-cut tooth geometry"), for example flat/trapezoidal or hollow/roof teeth, should be used to achieve a high cutting quality.

If a horizontal panel-sizing saw which has a pressure beam and sliders with collets is used to cut, the pressure should be reduced.

Coating

lisocore® boards can be subsequently coated with sheet goods on short-cycle / veneer presses and with rolled goods on calender presses.

The very low board tolerances of $\leq \pm 0.20$ mm mean that prior surface or calibration sanding is not absolutely necessary. We recommend light application of adhesive of approx. 50 – 80 g/m².

The pressing pressure and the pressing temperature must be adapted to the core material for surface coating. Compression of the core structure must be avoided at all costs. We recommend a surface pressure of 0.5 – 1.0 kg per cm² of sheet thickness or that the calender be slightly undersized.

Milling / contour milling / nesting

The tool must be matched to the respective panel in order to achieve a clean cut on the upper and lower side of the surface layers and the core structure when milling lisocore® panels. The coating is determined by the tool selection. HW and DP tools with alternating axis angles can be used. DP has a longer service life.

Good to very good milling qualities can be achieved at high cutting speeds and medium feed rate during contour milling and nesting.

For example, the following milling cutters delivered the best results in internal tests.

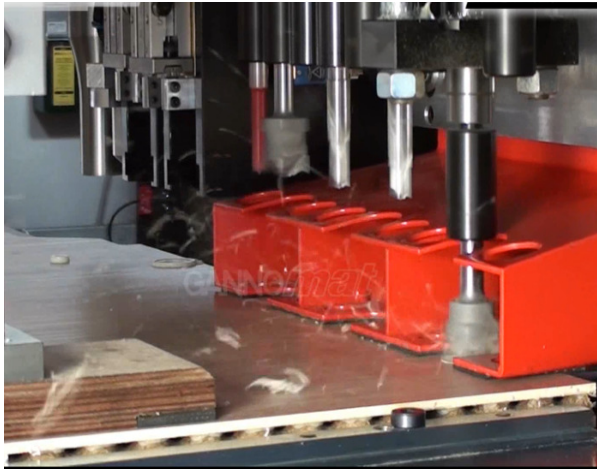
- Aigner / Konstantin C420 joint miller / diameter Ø85.0
- Aigner / Konstantin "Mini" end miller / diameter Ø16.0 - Ø20.0 and Ø25.0
- AKE / DP spiral end mills Z3 / Ø20.0 and Ø25.0
- LEUCO / DP end-rough-finish-milling cutter / Ø16.0 (item no. 185498)
- Pro-Lock / Z3 DP high-performance end mills / Ø12.0 / Ø20.0 / Ø25.0

Edging

Narrow surface coatings to lisocore® panels can be applied with conventional or industrial edge banding machines without a supporting edge. The cover layers should not be less than 3.0 mm thick to ensure high adhesive strength of the edge material. PUR adhesives provide the highest surface resistance. The edge band thickness must be selected according to the panel thickness.

¹⁾ We recommend you consult our application technology department if you have any further questions.

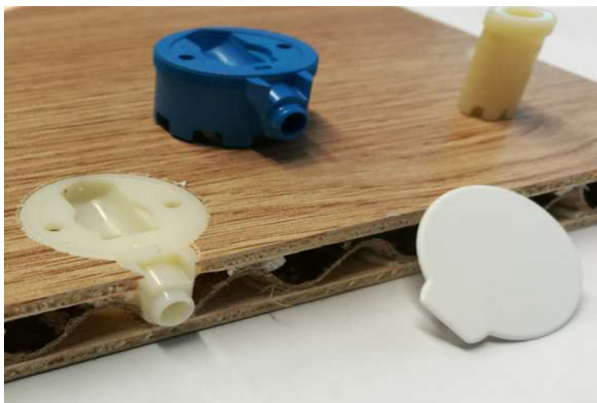
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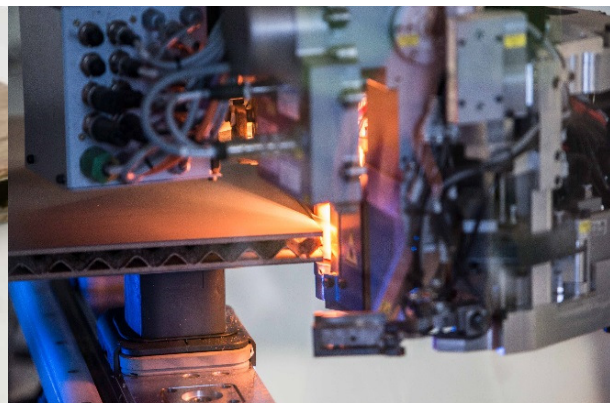
Drilling and milling on a machining centre



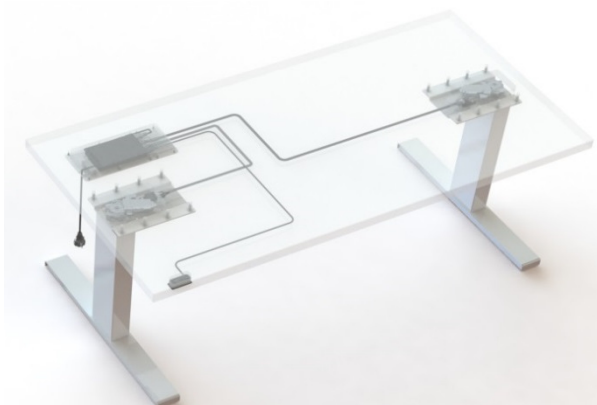
Coating with rolled goods on a calender press



High-strength connection points with Kaltschmelz® technology by Adolf Würth GmbH & Co. KG



Free-form machining and edging without supporting edge



Technology integrated inside the table top



Free-form table surface with high-strength screw connection points using blind rivet technology for table feet

This advice is for general information only. Not intended to indicate suitability for any specific application. It is generally recommended that you conduct your own processing tests.

As at 04 / 2020