

EDGE BANDING

Optical Zero Joint with Efficiency





EDGE SEALING AND GLUING

Challenge

In edge banding, not only the durability of the bond but also the perfect appearance is of great importance. The so-called "optical zero joint," an edge without visible adhesive joint, is used here as a quality feature. Robatech offers different adhesive application solutions according to the requirements.

Suitable Solutions

Whether EVA, polyolefin or PUR adhesives are processed, whether a basin is filled using a pre-melter or a complete nozzle system is required, Robatech offers the right solution. The Robatech adhesive melters can be connected to the host machine via a variety of interfaces and integrated into existing systems.

Edge Banding

In edge banding with the EdgePro slot-type nozzle, hot melt adhesive is applied to the exposed sides of materials such as MDF, plywood, and coated chipboard or blockboard and chipboards, as well as kitchen countertops. The desired adhesive application width can be set automatically or manually. Depending on the panel material, edge strips made of PVC, ABS, acrylic, melamine, wood or wood veneer are pressed onto the glued edge after adhesive application. A layer of edge sealant can be applied first for porous panels. The result is a smooth surface, using which an optical zero joint can be easily achieved in the subsequent edge banding.

Using the closed nozzle system, the adhesive amount is dosed precisely and applied with excellent repeat accuracy. This reduces adhesive consumption to a minimum and achieves significant savings over a roller application system. In addition, the efficiency is increased by short cleaning times, fast adhesive and color changes, and ease of operation. Furthermore, the pivotable mounting bracket of the coating head allows an easy adjustment of the contact force and a flexible positioning of the coating nozzle relative to the workpiece. Optimal positioning together with adhesive quantity control and the adhesive retraction system achieve repeatable gluing with clean cut-off.

Your Advantages

- Optical zero joint thanks to precise and repeatable adhesive application
- Clean cut-off with adhesive retraction system
- Fast set-up times and ease of operation
- Host integration and data analysis for process optimization

Nozzle System vs. Roller Application System

- Better adhesive quality, no contamination, and therefore excellent adhesion
- Process reliability through temperature monitoring across the entire system
- Integrated pattern control with automatic length control
- Increased productivity through fast set-up times and reduced maintenance
- Up to 25 % less adhesive costs



Edge sealing



Edge banding



Precise adhesive application