User Report

Fully automatic painting of window components

**Enormous time saving solution**

*Painting windows, using the classic method, is a time-consuming process. Venjakob has developed a system concept for the Norwegian company Gilje Tre that allows the coating process to be shortened rigorously - without compromising quality. Costs are reduced and flexibility in production is increased. The system pays for itself in a very short time.*

Until now, the coating of window frames at the Norwegian window manufacturer Gilje Tre was done manually. The individual parts were impregnated in the first step, then the frames and casements were pressed, placed on an overhead conveyor and primed and spray painted by hand. The drying time on the overhead conveyor alone took several hours. The customer wanted a complete automation of the coating process with the aim of being able to produce more windows in less time and with a consistently high quality.

**Technology developed close to the customer**

Components, stairs, windows - Venjakob has been developing system solutions for the surface treatment of various components in industrial painting for decades. Existing technologies are further developed close to the customer's requirements. This also applies to Gilje Tre. A fully automatic coating line for the use of modern water-based paints was designed. The coating line is designed for highest application efficiency, fastest possible drying and maximum output from the entire parts logistics.

**Drying time much shorter than before**

For the automatic coating process, each window component is fed directly from the profiling to the painting line. The individual parts are identified by the system via RFID technology and the preset program is triggered. The components are impregnated, primed, dried, top-coated, dried, automatically turned and fed back into the process lying flat in one pass - until the six-sided coating is completed. Afterwards, the components go directly to the order picking system, where the frame and casement can be pressed together.

The high-performance drying system is responsible for the majority of the time savings. "One coating run takes about 12 minutes, making 48 minutes for four coating applications. Previously, about four to six hours were spent on the drying process. There is no faster way to coat and produce windows," says Oliver Milde, key account manager at Venjakob. The automatic coating process therefore also simplifies the production of single parts. "The short production times and the higher flexibility have given the company a significant advantage in the market," says Oliver Milde.

**Link to the picture material:** [**https://my.hidrive.com/share/645nbhzhsr**](https://my.hidrive.com/share/645nbhzhsr)

Photo line 1 -

Complete Gilje Tre coating line: 360° impregnation of the single window parts in a continuous process, workpiece transfer and forwarding, IR preheating station, top coat application and gentle, forced drying. Fast and efficient.

Photo: Copyright Venjakob - free for publication

Photo line 2 -

VEN SPRAY MOULD - the spray coating machine for mouldings and profiles offers an application efficiency of up to 90 percent

Photo: Copyright Venjakob - free for publication

Photo line 3 -

Window component in the spray booth with Coolac® paint recovery system

Photo: Copyright Venjakob - free for publication

Photo line 3 -

VEN BRUSH - if desired, the line can be supplemented with a brush sanding and smoothing machine for intermediate lacquer sanding. This can also be equipped with disc brushes.

Photo: Copyright Venjakob - free for publication

Contact partner:

Oliver Milde

Phone +49 5242 9603-120

omilde@venjakob.de

Contact partner for editors:

Nicole Mihlan

Phone: +49 5242 9603- 264

nmihlan@venjakob.de