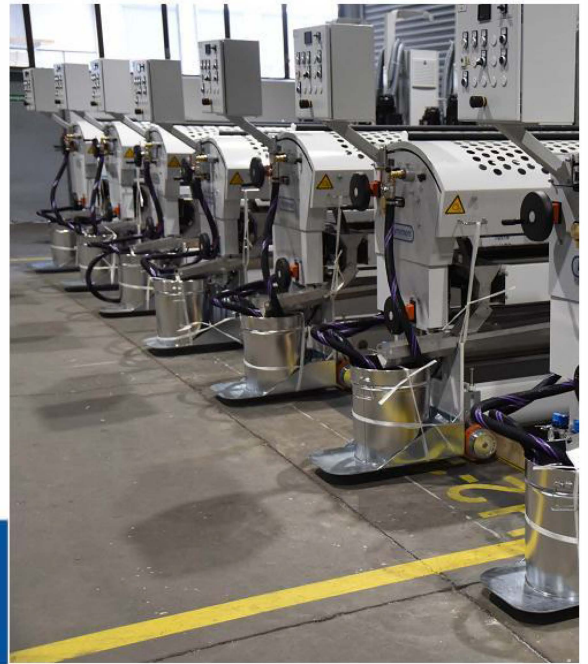
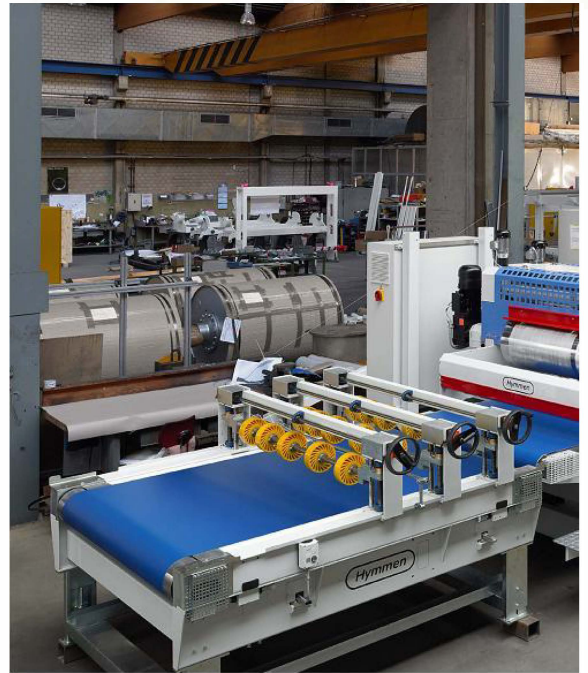
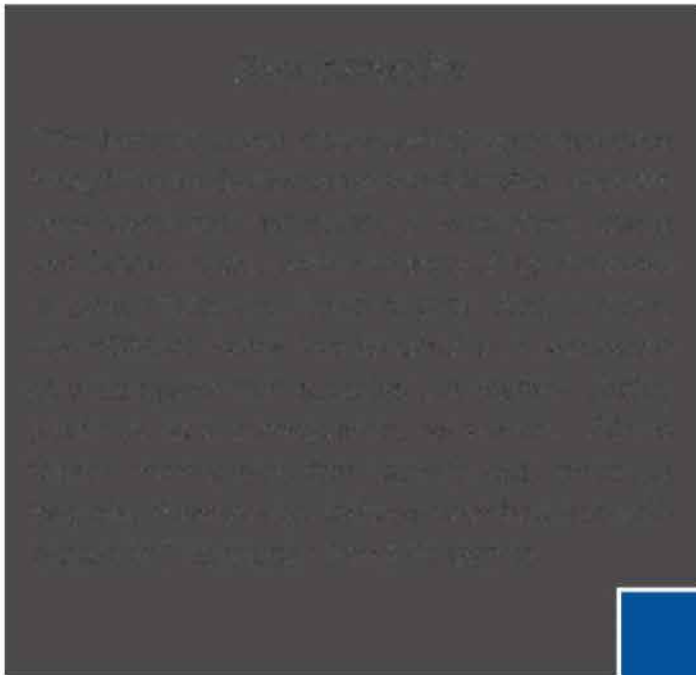


The industry is currently experiencing a period of rapid growth, and this is reflected in the increasing demand for high-quality wood and panel products. This growth is driven by a combination of factors, including the increasing demand for sustainable building materials, the growing popularity of wood and panel products in interior design, and the increasing demand for high-quality wood and panel products in the construction industry.

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CASE STUDY 2:

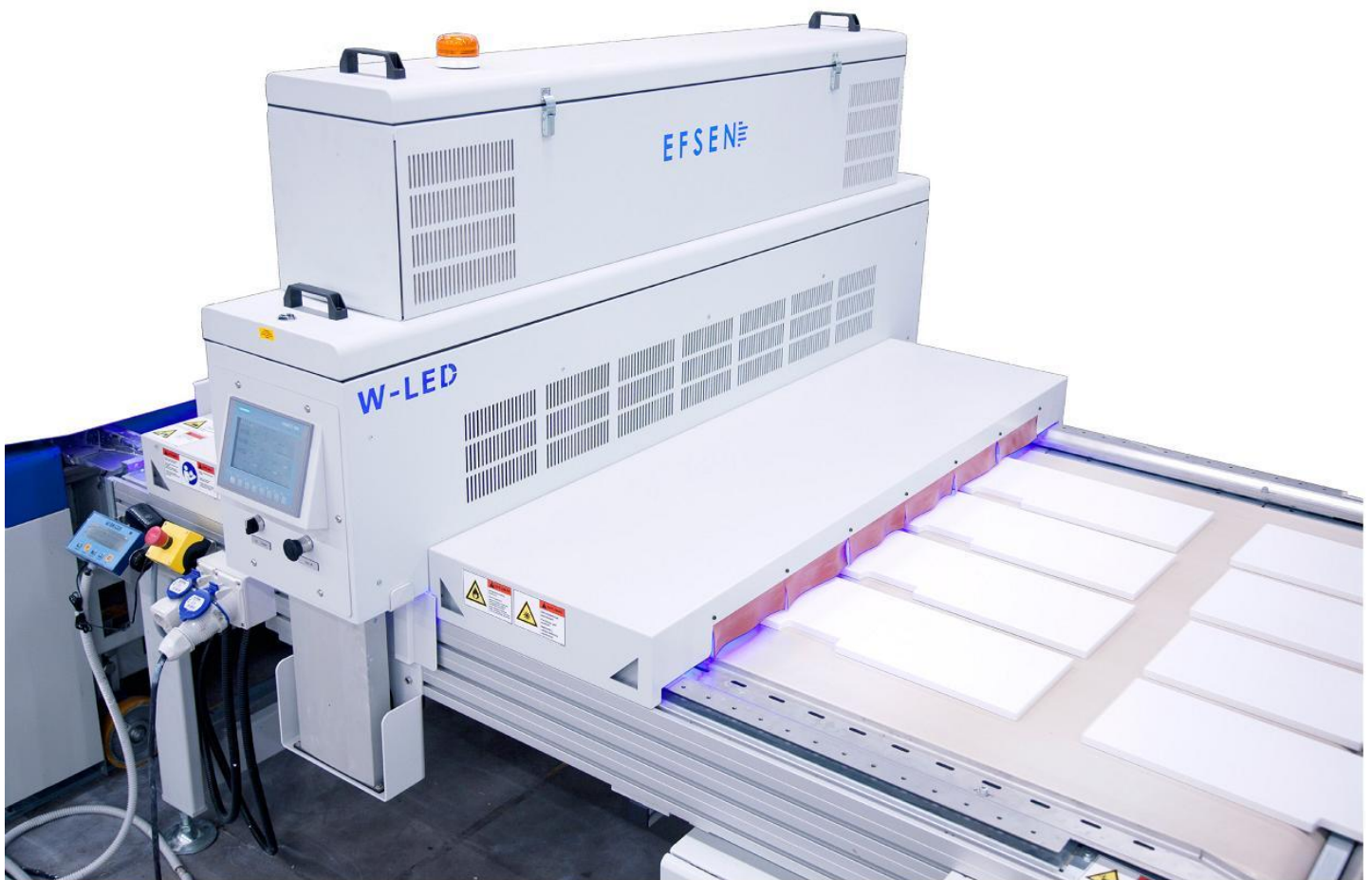
Freda relies on Intelligent UV Line for High-End Furniture Parts from Hymmen

Freda is known for its high-end furniture components. As supplier of a global Swedish furniture supplier the company recently invested in a new intelligent UV coating line to be installed shortly. It matches the unique ICAD® Technology from EFSEN UV with the high-end coaters and system integration from Hymmen.

Having ICAD® on their first UV LED line has shown the value of full width inline UV monitoring, making ICAD® a “must have” for their second line. A robust UV solution should be matched with robust application equipment, and Freda has experienced the reliability of Hymmen GmbH Maschinen- und Anlagenbau machinery through years of production meeting the highest quality standards.

UV technology is often associated with high productivity and quality, something that is also greatly valued at Hymmen and EFSEN. Hymmen are specialists at customised solutions utilising their industrial expertise ensuring an efficient and flexible production process. The innovative UV-LED technology is the perfect match, with reduced energy consumption and higher process stability. EFSENs ICAD® technology provides an efficient automated solution for ensuring all the thousands of UV-LED diodes in the line are monitored continuously. This ensures a constant UV output, a necessity for maintaining a steady, high output of top-quality products.

For Freda it is important to ensure the highest possible quality of all the products they send out to the market. Hymmen has a long reputation of manufacturing some of the best coaters and line handling systems in the world of furniture coating. Combining this line setup with the intelligent W-LED system from EFSSEN that controls itself during production with inline and continuous measurement gives Freda the possibility to reliably secure the quality and curing performance of each single product. With ICAD® from EFSSEN and the coating line from Hymmen, UV curing control can be taken to the next level: The system can document the curing conditions for each batch, as a proof that it has cured according to the standards of its customer. Freda is currently



the only producer that can offer this documentation and that is in line with the company’s strategy of being best supplier of pigmented furniture of the global Swedish furniture supplier.

The new production line of Freda ensures an outstanding flexibility concerning the sizes of production material: From single large boards to a high number of small parts that can be processed in one single batch. To ensure the reliable high surface quality it is critical to success to position and fix the small elements exactly on the transport belts – especially with the high cycle rate at a speed of 50 m/min. This causes a high level of complexity in plate handling with which the Hymmen technology can cope.

With an overall length of approximately 100m the whole finishing line includes the EFSEN W-LED technology, the feeding and stacking system, portals, transports, roller coating machines and direct printing machines as well as the process automation from Hymmen.

“We are confident that the Hymmen line with EFSENs UV will provide the optimal conditions for efficient production, pushing the boundaries of the technology”, says Audrius Cicirka, Technology and Development Manager, Freda.

