

# FULLY-AUTOMATED PAINTING PROVES A SUCCESS RECIPE FOR MOELVEN

**As more and more customers opt for ready-painted products, a modern production line that combines painting, drying and stacking of painted timber products has proven to be a successful concept for Moelven.**

**Many people perhaps** associate automated production with a factory full of industrial robots. The motor vehicle industry is perhaps what most people would associate with advanced automation.

**But it is** an established fact that automation is used in lots of branches of the industry. The chemical, pharmaceutical and food industries are all large users of extensive fully-automated production processes. Another such industry is the forest industry, with all of its constituent parts: sawmills, timber products as well as construction timber.

**An investment in automated** painting was a way for Norwegian building materials supplier Moelven Langmoen AS to extend its product range and boost its competitive standing in the areas of sawn timber products. This in an industry where many competitors offer similar products.

**Important customers for** Moelven Langmoen include the Nordic DIY chains ByggMax and Beijer Byggvaror, which it supplies, among other things, with sawn timber products, e.g. building timber and mouldings. In total, they have about a hundred DIY stores and builders' merchants as customers.

"We have been offering our customers the option to purchase ready-painted products for well over ten years. Everything started on a relatively small scale, but we have been observing a marked growth in this segment in the past two or three years," says Ole Anders Lagmandsveen, Director at Moelven Langmoen AS.

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**And so he continues:**

"In just a couple of years, we have gone up from around 3,500 m<sup>3</sup> of ready-painted timber products per year to an annual volume of 8,500 m<sup>3</sup>."

**In other words,** it is no longer just ready-painted mouldings or primed, rough-planed exterior cladding that customers want. They want more.

"More and more of our customers become aware of the overall time savings they can realise and of the even quality they can achieve if painting were done in a controlled industrial environment."

**A rising clientele** of end-customers, i.e. both private persons and professionals, order ready-painted construction materials through their DIY stores and builders' merchants.

"We at Moelven can deliver ready-painted products in the exact Jotun colour that is desired by the end-customer."

**And this can** generate both time and cost savings for our end-customers. We compete, in other words, above all, with the traditional manual way of applying paint on timber products.

"Customers have discovered that this new method makes it possible to push prices down compared to traditional manual painting, even when it comes to relatively small series."

**For example, insofar** as building timber for façade cladding is concerned, Moelven can deliver products that are both just primed and products that have their first coat of paint applied.

"Our customers can finish the house they are building much faster if, for example, their exterior cladding arrives ready-painted. And there is a quite clear trend for customers to demand more than one coat of paint. Whether it is two or three of them."

**In other words**, it goes much faster to apply the last coat of paint once the building timber is in place. At the same time, what is more important, ready-painted construction materials that are intended for use outdoors already have protection against the elements.

**But all this** would not be possible without a typical industrial process.

"Customers place high requirements for the repeatability of colour. New orders for the same colour must have the exact same colour as previous orders."

**Ole Anders Lagmandsveen** describes Moelven's painting installation as a complete line where painting, drying and stacking machinery are automated and linked in a chain.

"Another advantage that facilitates things is that the equipment is capable of storing all settings that are associated with a certain dimension. And it is also possible to alternate between spray nozzles and brushes, which makes it possible to paint both planed and unplaned timber with the very same painting machine."

**What is vital** in many industrial processes is the option to quickly change over between individual orders.

"Thanks to the painting machines' washing programs, it is possible to quickly switch from one customer order to another one, however small any of them could be. Even to series all the way down to 100 metres."

**Text: Anders Edström Frejman**

## **FACTS**

Moelven Langmoen AS keeps on stock most of Moelven Wood's products. In addition to this, they have a planing mill and an impregnation and painting plant. The latter is fully automated.

# **Flexible Painting Machinery for High Quality and Productivity**

Automated painting machines combine high productivity and reliability with a quick payback period.

"They can also be incorporated as an integral part in a fully automated process," says Jesper Frandsen, CEO of Ceetec.

Ceetec is a family-owned company that has been manufacturing painting machinery for industrial applications for more than 40 years. What sets this type of machine investment apart is, among other things, the quick payback period.

"Our small A250 brushing machine, which paints at a speed of 40 metres per minute, has a payback period of around 30 hours," says the company's owner and CEO, Jesper Frandsen.

It is, among other things, the enormous difference in productivity compared to manual painting that makes painting machines such an interesting objects of investment. A speed of 200 metres per minute is not unusual.

"Whether it is a matter of relatively compact machines for mouldings, exterior cladding or joists or a bit larger machinery for painting of, e.g. doors or kitchen cabinet doors, all machines have the same common denominators: High productivity and quality and outstanding final finish of the products."

*The IP Touch machine has been delivered to the Moelven Group, among other clients.*

Ceetec manufactures machines that employ both spray nozzles and brushes for applying the paint. Certain machines, for example, IPC250 are combi machines that can apply paint using both methods of application.

"This makes it possible to use the same machine to paint several different products, which makes the investment even sounder," says Jesper Frandsen.

One of the company's most recent developments is the IP Touch machine. This is the first CNC-operated painting machine on the market. The machine saves painting data for different types of products, which prevents operator dependence at the same time as it ensures a high degree of repeatability of the quality of recurring products. The final result remains the same 100%, every time.

The IP Touch machine is also equipped with an automated washing program that enables quick change-over between orders.

"Using brushes offers many advantages. For example, it helps the paint penetrate better into the wood and eliminates the need for absorbing residual paint."

Something else that distinguishes the company's machines is their ability to both be used in stand-alone configurations and as an integral part of a fully-automated chain.

"Timber can be fed into the painting machine immediately as it comes out of a planing machine, then pass through a dryer and be transported at once to a storage site."

Flexibility, efficiency and simplicity are key words for the company's products. This is what also distinguishes Ceetec's new Duoflex automated spraying machine. It can be used for painting everything, from small boards to doors.

"This type of overhead spraying machines normally tends to be extremely expensive. But thanks to our year-long experience in surface treatment, we have been able to develop this product at a very good price," says Jesper Frandsen.

The company, which has around 20 employees, has its own service organisation and offers, if so desired, on-site service to its customers. But Jesper Frandsen also wants to emphasise the close cooperation they have with their customers.

"Our customers' desires are a major driving force for the development of efficient, operationally reliable and trustworthy machinery. Whether it is custom-made or standard machines – we do it all."

*Ceetec DuoFlex Spray can be used, among other things, for painting kitchen cabinet doors and various pieces of furniture.*

*Jesper Frandsen, CEO of Ceetec.*

### **Why a painting machine from Ceetec?**

*Short payback period.*

*High machine speed and productivity.*

*High operational reliability.*

*Short change-over times. Option for short series.*

*· Quick change-over from brush to spray gun.*

*Option for an automated washing program.*

*Even and high quality.*

*Can be integrated into automated production.*

*Well-developed service network.*

*All of our products are developed and manufactured in Denmark.*

*Ceetec is a niche company with a focus on 4 core areas: Ceetec painting machines, Ceetec roll former lines, Ceetec sanding machines and CNC processing. Ceetec, also known as Nr. Åby Maskinfabrik, was founded by Sigfred Steen Hansen in 1970. After more than 35 years as Chief Executive Officer, Sigfred Hansen passed the position and the complete ownership of the company onto Jesper Frandsen in 2006.*

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