



Vaillant

How Team Spirit Solved a Conveyor Challenge

Facing an unexpected production surge, Danish Industrial Automation company Caldán Conveyor rose to the challenge, doubling the size of an overhead system for a German heat pump manufacturer's new plant in Slovakia. With a tight timeframe and a collaborative spirit among Caldán, Czech customer ITS, and end-customer Vaillant Group, the project not only met its demanding requirements but also showcased the power of teamwork and innovation.

The increased need for energy-efficient technology after the Ukraine invasion meant that when a German heat pump manufacturer asked our Danish Industrial Automation company

Caldan Conveyor to build an overhead system for its new plant in Slovakia, it seemed like any other routine order. But a surprise was in store for Caldán CEO Claus Nørgaard and his team a few weeks later. Production was already under way when the customer called to say that market demand was rising so fast it needed a solution twice the

original size.

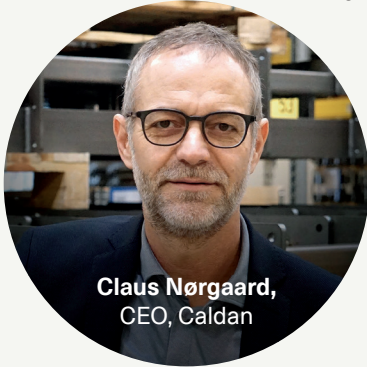
“We were already constructing a huge conveyor, with annual capacity to convey 150,000 heat pumps to the customer’s paint shop. So, it was a bit of a nice surprise to hear they wanted to double output to 300,000 units,” Claus recalls.

Suddenly it was unclear how the project – a three-way collaboration between Caldán, its Czech customer ITS, a paint plant construction specialist, and end-customer Vaillant Group – could be delivered.

Urgent brainstorm

“We pulled the handbrake, travelled straight down to Vaillant with our technical manager and spent two days in Germany on the drawing board sketching and working out how to do it within the factory footprint,” says Caldán Project Manager Marcus Henningsson. “We came up with a solution that was even better and more flexible than the first one.”

The next challenge was to build and deliver the solution in the tightest of time frames. According to Marcus, the key success factor was the strong relationship between the Caldán and ITS teams.



Claus Nørgaard,
CEO, Caldán



A global leader in the surface treatment industry, specialising in the design, manufacturing, and installation of conveyor systems customised for surface treatment, material handling and intralogistics applications.

Founded in 1963


Part of Axel Johnson International since 2020

Headquarters in Galten, Denmark

Number of Employees 162

Market Presence Denmark, Sweden, France, Germany, UK, India and China.





“We’ve been working with ITS for ten years and our values are aligned. We know each other. It’s easy to work in a trusting and supportive environment. That kind of teamwork, along with the end-user’s backing, is the recipe for success,” he says.

Claus adds: “The points of difference were the team spirit at Caldan and the close cooperation with ITS and Vaillant to work together to pull this off in such a short time. You can achieve a lot with team spirit, shared values, and trust.”

Careful supplier selection

Caldan’s ability came as no surprise to Vaillant. The German company carefully selects its suppliers, making sure they share its approach to quality, delivery excellence and sustainability.

“Vaillant has a tremendous focus on sustainability when it comes to recovering heat and reusing process water. They have their own water treatment plant, and they look closely at

When building the Slovakia plant, the company discovered that a rare species of frog inhabited the area. Decision was made to build a frog tunnel on the factory access road to make sure the amphibian was protected. These are some of the active measures taken to protect biodiversity when building the factory as well as including solar panels on the roof.



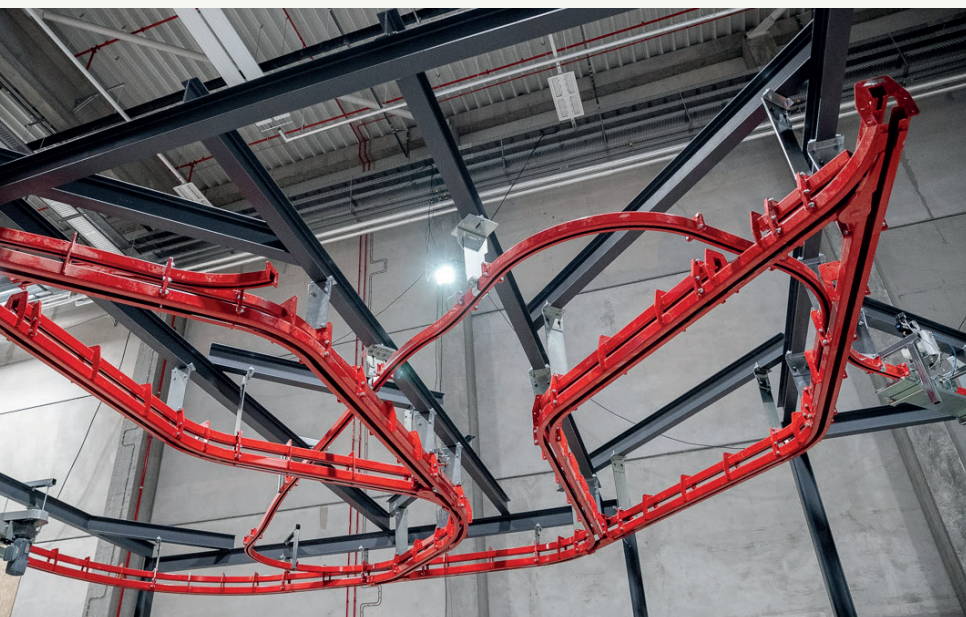
the fine details,” Marcus says.

“At Caldan we embrace the sustainable loop approach. Vaillant like to work with us because we share their goals. It’s great working with a company that has those values. The frog tunnels have a symbolic value,” Marcus says.

Conveyor junction

Inside the plant, the Caldan overhead conveyor looks like a giant jumble of colorful rails. Some 3,385 metres of chain, crammed into a confined area, transport one product wagon every 26 second.

The wagons carry heat pumps for pre-treated



and painting of their sheet metal surfaces. Then the wagons convey the treated units to an oven for drying.

In all, the plant has 16 stations where different models with different parts and colours are treated.

“It’s a challenge to build a system that can handle that level of complexity while painting a huge quantity of different parts. But it gives the customer great production flexibility and allows them to scale up for future products,” Marcus says.

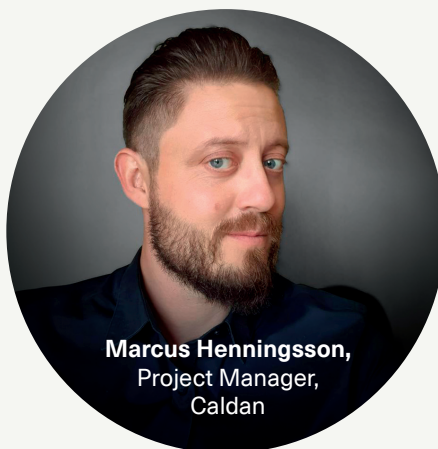
High eco standards

High environmental standards are visible in the energy-efficient conveyor motors and Caldan’s commitment to use water-based paint.

Claus says: “We also have high health and safety standards around our operations, and we require suppliers of all solutions to have the appropriate environmental certificates. In addition, 95 percent of our suppliers have signed the Axel Johnson International Supplier Code of Conduct.”

For Caldan, the project has opened new doors. It is now working to provide Vaillant with a conveyor for its new heat-pump factory in France. Caldan will be Vaillant’s preferred supplier for conveyors when it builds new production sites.

“Part of our strategy is to deliver to responsible customers,” Claus says. “ITS is a responsible customer and we know for sure that Vaillant is. We care about our customers, our colleagues and our surroundings. That makes a difference when you’re working on complex, demanding projects.”



Marcus Henningsson,
Project Manager,
Caldan

VAILLANT GROUP

Double up for Vaillant!

When Vaillant Group management asked Factory Planning Manager Fabian Struif to double capacity at the greenfield plant it was about to build, his initial reaction was “mission impossible”.

“My first thought was, it’s manageable, but not within our existing timeframe because the production start date was already fixed. Caldan and ITS proved me wrong!” he reveals. Just nine months later, the factory was ready. And although the conveyor system and paint line had been finalised in record time, the first trial run of the painting process went like clockwork. Fabian admits to being astonished that a collaboration involving multiple cultures and mindsets – German, Slovakian, French and Scandinavian – could work so smoothly. “It was very impressive – and a sign to me that the collaboration between Caldan and ITS was not a first try but that these two partners were highly experienced in working together,” he says. “Without that strong collaborative effort from all sides such outstanding performance would not have been possible.”



Fabian Struif, Factory
Planning Manager, Vaillant