



Company:  
Lindab

Location:  
Sweden

Products:  
Autodesk Platform Services  
Autodesk Revit BIM  
Autodesk PLM  
Autodesk Architecture, Engineering & Construction Collection  
Autodesk Product Design & Engineering Collection  
Autodesk Fusion 360 Manage with Upchain  
Autodesk Vault Professional

Lindab's history stretches back over 60 years, when a small sheet metal workshop was founded in Lidhult, Sweden in 1956. The business later moved to Grevie on the Bjäre Peninsula where AB Lidhults Plåtindustri was registered as a company in 1959 with Lage Lindh and Valter Persson as founders. 10 years later, AB Lidhults Plåtindustri was renamed Lindab.

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**Henrik Bengtsson,**  
Digital Business Development  
at Lindab

With its core values including remaining down to earth, neatness and order, and customer success, Lindab has grown into a leading international ventilation company, offering solutions for energy-efficient ventilation and a healthy indoor climate in Europe, listed on the Swedish stock exchange, Nasdaq Stockholm. The products are characterised by high quality, ease of installation and environmental thinking. In northern Europe, Lindab also has an extensive range of roof, wall, and rainwater systems.

Over the past few years, the company has expanded its team to 5,000 employees across 20 countries. Boasting annual sales in 2022 of SEK 12,366 million and an operating

# Lindab's Breadwinner: Showcasing BIM Innovation with its Sandwich Panel Selector Tool

## Autodesk's Platform Services support Lindab to create BIM objects on demand, directly from the cloud



margin of 10.9%. Lindab's products and system solutions are offered out of two business areas, Ventilation Systems and Profile Systems.

Ventilation Systems, which make up around 68% of the Group's net sales, offer installers, and other clients in the ventilation industry, duct systems with accessories, and indoor climate solutions for ventilation, cooling, and heating. Lindab's Profile Systems, which make up the remaining 32% of net sales, offer the construction industry products and systems in sheet metal for rainwater systems, roof, and wall products as well as steel profiles for external walls, partition walls and ceilings.

As an Autodesk partner of 20 years, Lindab wanted to expand its digital capabilities in its Profile Systems through Autodesk's Platform Services (APS) and BIM to power further innovation and access higher-value projects, including the launch of its Sandwich Panel Selector tool.

### Driving innovation via the Sandwich Panel Selector

No two building projects are the same and Lindab strives to offer its customers the best sandwich panels for their projects based on a variety of factors.

It is not just changing sustainability regulations that are having an effect on the type of challenges architects and designers face today, but also changing customer needs and preferences. Macro-economic struggles, skills shortages in the industry, and a global housing shortage means that installations in commercial and residential buildings need to be efficient, cost-effective, quick to market and innovative to ensure they are ready for tomorrow's challenges, as well as today's.

Lindab sandwich panels are a series of insulated building elements for external walls, partition walls, and ceilings. The building elements are made of thin sheet metal with a mineral wool core. The Swedish-made panels are made of High-Build-Polyester-coated steel sheet that withstands corrosion class C4 and has high UV resistance.



Lindab launched its Sandwich Panel Selector tool in late 2021 as the market's only product selector that creates BIM objects on demand, directly from the cloud. It helps architects design properties with an attractive exterior without compromising on energy savings, sound insulation and fire safety. The sandwich panels are prefabricated building components that guarantee high quality and low costs.

The tool uses a variety of Autodesk Platform Services' API's such as Data Management, Model Derivative, Design Automation and Viewer. This allows architects to customise their BIM object to their own preferences and have it shipped directly to them. The Lindab Sandwich Panel Selector is interactive, and choices of profile and colour become immediately visible in a 3D model, where the user can simulate a simple panel, a panel wall with pilasters, or even an entire hall building.

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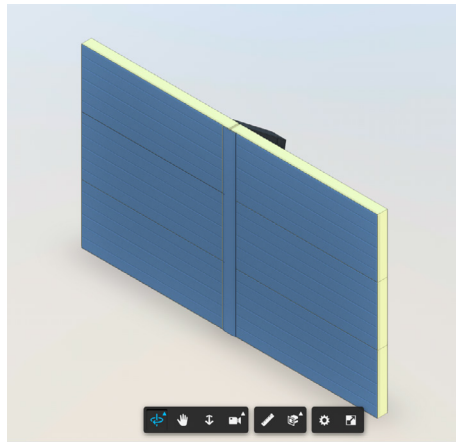
**Henrik Bengtsson,**  
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In the industry, Lindab is also very well known for its BIM-facilitating approach to their products and services. Henrik Bengtsson, Digital Business Development at Lindab believes that the organisation's adoption of BIM and its Sandwich Panel Selector tool has helped to dramatically increase Lindab's presence among architects and designers because it simplifies a lot of tasks when they are looking for the right product for the project.

"With so much change in the buildings sector, we have to evolve alongside our customers not only as a business, but in our offerings, too. Architects see an enormous uplift in productivity and speed to market thanks to the Sandwich Panel Selector tool as it enables them to quickly find and reuse design data and minimise rework and repetitive tasks. Each installation is different, so it allows them to be flexible. We must be flexible too, and evolve our products to meet customer demand," says Henrik.

The tool is very intuitive, and architects can create BIM models that save them time in future projects because they don't have to repeatedly create models from scratch.

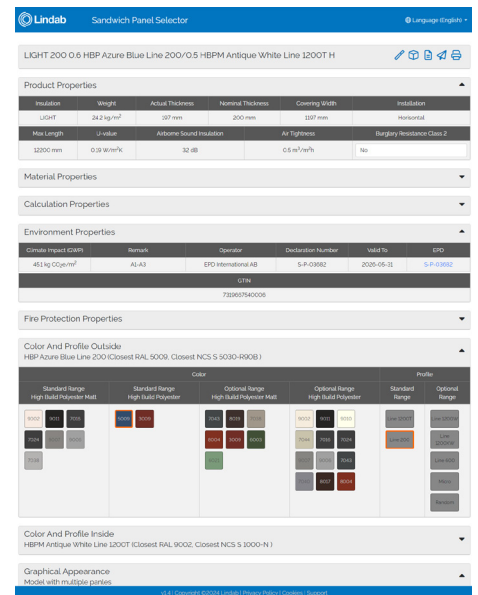
"The BIM object is an integral part of the actual product itself," says Henrik.



"That is why we have developed our own platform for product selections, built around Autodesk Platform Services (APS). It makes it easy for them to make decisions based on all necessary data in one solution. These decisions are based on product specific options in terms of visual appearance, like colours and surface patterns, structural design capacities, environmental aspects like global warming potential and other environmental certification/classification systems."

"Once the decision is made, the customer can create their Revit BIM-object on demand, export and save the complete product configuration to be able to return later on for modifications."

"The requirements of using BIM-objects once we deliver our project documentation has increased, as well as the demands for structural metadata and the use of classification systems. We can now streamline the distribution of building documentation. PDFs have always been the format for sharing this information, but they don't enable the full power of the BIM-model for the consumer. With APS, we can streamline and simplify the visualisation both in terms of graphics and data, which makes it easier for our customers." "BIM-information should be for everyone, but it can be prepared in a much better way if you use the power of APS. With APS, from concept to delivery, customers have everything all in one place," adds Henrik.



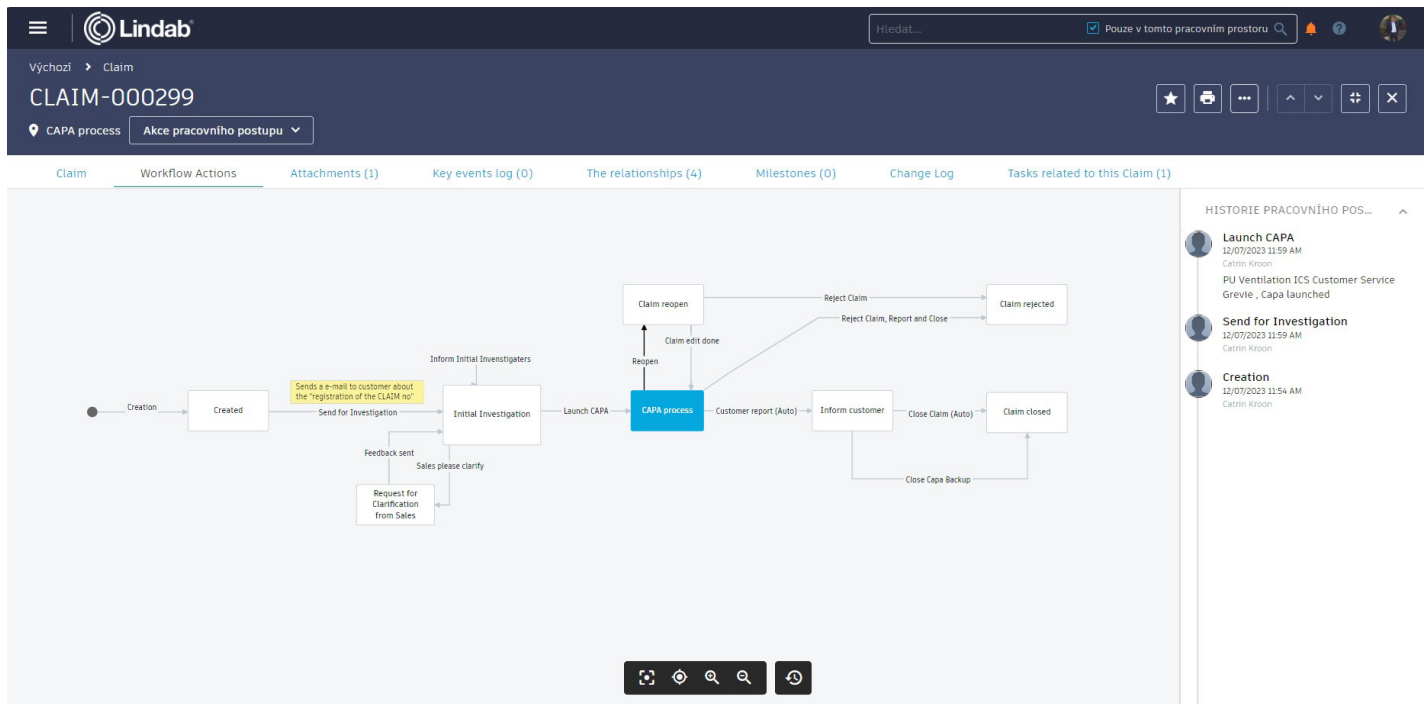
## How Lindab ensures quality in its products

In line with the company's continued growth trajectory, digitisation and collaboration are key for Lindab to be more efficient and improve speed to market. Maximising data insights is key for Lindab to ensure that its products and services are market leading and are evolving in line with customer demand and industry trends.

Open, clear communication is key to faster and high-quality product development. To eliminate confusion, data loss, and delays, Lindab also adopted a cloud-based product lifecycle management (PLM) system from Autodesk, to make sure teams were working from a central source of organised data.

PLM manages data and processes throughout the product lifecycle, from initial idea through development, manufacturing, service, and retirement. PLM software centralises and automates process workflows and enables cross-functional collaboration for all stakeholders. PLM software provides such capabilities as new product introduction (NPI), change management, supplier management and quality management.

Lindab uses Autodesk's PLM offering in its quality department to prevent and rapidly respond to product design issues and supplier problems. It provides Lindab with a central location for quality data to assess trends and prevent failures before they occur, automatically sending tasks, reminders, and escalations to team members when work needs to be completed.



Get a complete view of your quality data and critical processes from nonconformance to return merchandise authorizations (RMA), corrective and preventative actions (CAPA), failure mode and effect analysis (FMEA), supplier quality action report (SCAR), and engineering change.

Tomas Martinak, Group Quality Manager at Lindab said: “At Lindab, our products and solutions have a strong focus on innovation to create added value for customers. One of our organisation’s driving ambitions is to offer top-quality products which help to build top-quality buildings. As such, our quality department is always looking for new innovative ways of working and works closely with Autodesk’s PLM offering to mitigate quality issues. We share product field performance and quality information with engineers in a centralised system to improve designs, identify supplier problems, and make corrections. Both the quality and engineering teams have a closed loop change process to improve product designs to meet our evolving customer needs.”

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### Building a sustainable future

The buildings sector’s sustainability challenges continue to grow with the industry accounting for over one third of global energy consumption and emissions. The operations of buildings account for 26% of global energy-related emissions (8% being direct emissions in buildings and 18% indirect emissions from the production of electricity and heat used in buildings).

Lindab views sustainability as a way of thinking and working, everything from the purchases it makes to the deliveries and the services it offers its customers. Together with its customers, Lindab is aiming to reduce its environmental impact by offering leading energy-efficient products and systems with a high degree of recycling.

Through PLM, Lindab’s customers get a clear view of the environmental impact of the products they choose.

“We take a sustainable approach to product design, but we also need our products to be specific to each customer. We are always tracking how our products are used, which are the most popular, and which are the most efficient so that we can make adaptations to ensure that we always have the highest quality offering, designed in the most cost-efficient and sustainable way,” Tomas added.

Empowered by Autodesk, Lindab continues to grow and innovate, while meeting its own sustainability ambitions. “We have a responsibility as product designers in the building space to consider the environmental impact that the use of our products will have on projects. Our Revit

platform makes it possible to realise some of the important BIM benefits in project management and data integration between project parties, ensuring lifecycle management and improving environmental impact,” Henrik concluded.

