Case study: PWA 2000



CONNECT AND PROTECT

Swedish wire machine builder gets the 'automated edge' and saves 50% in panel building production time.

DETAILS	
Location	Ljusfallshammar, Sweden
Situation	Lämneå Bruk AB, a wire machinery and equipment builder, aimed to turn projects over faster to meet customers' needs.
Solution	nVent HOFFMAN ModCenter 263 for precision automation of holes and cutouts to reduce lead times, and five nVent HOFFMAN Personal Wiring Assistant 2000 machines for automated wire prep, saving time and reducing costs.
Results	The Swedish wire machine manufacturer is turning completed projects over faster and with precision – and has saved 50% in panel building production time due to the investment.

SITUATION

With a passion for great service, Jonas Hagstedt, the owner of Lämneå Bruk AB in Ljusfallshammar, Sweden, was determined to find a way to fulfill customer orders faster without compromising quality.

Founded in 1727, the company has had a long history of building high-quality, innovative and efficient machine solutions with highest user-friendliness and high levels of customization for maximum benefit and profitability for their international customers. Today, Lämneå Bruk's machinists design and manufacture a wide variety of technological advanced machines for different wire types – from small single machines to complete lines. As part of its promise, the company takes full responsibility for every part of the machine, including electrical design, manufacturing of the machine and control electrical cabinet assembly as well as programming, all of which is done on-site at their workshop in Ljusfallshammar.

Traditionally, the team largely built the electrical panels and cabinets manually, which required significant time and resources. After consulting with some trusted experts, Hagstedt turned to nVent HOFFMAN to take advantage of the industry's leading "automated edge" equipment.

"We appreciated how easy it is to do business with nVent," Mr. Hagstedt said. "In each case, the nVent HOFFMAN technical team helped us determine the right solution for our needs. They provided very good advice and were friendly and communicative."

SOLUTION

First, Jonas Hagstedt invested in a nVent HOFFMAN modification center, the industry's most versatile automation solution for precision machining for holes and cutouts. With state-of-the-art design and controls, nVent HOFFMAN modification centers are known for best-in-class cutting speeds, repeated precision, enclosure size handling capability and ease of use. Based on his company's project needs, Lämneå Bruk selected the ModCenter 263 model, which handles enclosures up to 1.600 mm (63 in) x 2.200 mm (86.6 in) and flat material up to 1.600 mm (63 in) x 2.400 mm (94 in).

With the ModCenter, the Lämneå Bruk team can quickly and cost-effectively machine mild steel, stainless steel, copper, aluminum, fiberglass and thermoplastics to deliver shorter lead times for customers.



Jonas Hagstedt (Lämneå Bruk AB) and one of the nVent Hoffman PWA2000

Jonas Hagstedt also purchased a nVent HOFFMAN PWA 2000 (personal wiring assistant) to automate wiring prep and installation. Compared to traditional wiring methods, PWAs save significant time and money – PWA 2000 cuts wires – 400-500 per hour – to exact lengths to crimp them directly. And, six months later, he invested in four additional PWA 2000, including crimping stations and printers, to automate the entire electrical department. At Lämneå Bruk, automation starts with switchgear planning in the office, which creates the necessary data for the PWA systems. From there, the automated wire prep, cutting and installation takes place in the workshop. Electrical department personnel receive all the information needed to install the wire, which is produced just in time by the PWA 2000. Each also receives a visualization of each wire for connection to components, eliminating the need to read a classic circuit diagram.

RESULTS

nVent delivered both the state-of-the-art modification center and PWAs on time and as expected.

Lämneå Bruk quickly took advantage of the "automated edge" to speed the delivery of enclosure modifications for one of its longtime customers. They also secured new business, thanks to their new wire processing capabilities. Overall, the investment in the ModCenter and PWAs has saved Lämneå Bruk 50% in panel building production time.

"As part of our sincere commitment to providing excellent customer service, we are always looking for ways to get our customers what they need as speedy as possible and with the highest quality", Jonas Hagstedt said. "Incorporating automated precision machining and wire processing capabilities into our workflow has been well worth the initial investment. We are precisely meeting our customers' needs faster, with great quality and more cost effectively."



Niklas Fast, Robert Kruekel (both nVent Hoffman), Jonas Hagstedt (Lämneå Bruk AB) and the ModCenter 263



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