

GARO securing the power supply for Micropower Group's new battery and charger factory

In the city of Växjö in southern Sweden, a new era is taking shape for the company Micropower Group with the construction of a state-of-the-art and climate-smart plant to gather all operations under one roof. GARO has had the privilege of being involved in this project by providing the new plant with custom power supply solutions.

Micropower Group, a leading manufacturer of batteries and battery chargers, is in the final stages of the construction of its new state-of-the-art plant in Växjö, which is expected to be completed in the spring of 2025. The new factory, spanning more than 25,000 square metres, will gather the company's operations under one roof. The plant will house the company's head office and production facilities as well as its research and development centre. Resembling the rotor in an electric motor, the new head office reflects the company's strong ties to the world of electrification and sustainability, in which Micropower Group is a leading player. Much of the company's operations have already moved into the new premises and production is well under way. Once the entire plant is completed in the spring of 2025, the new factory will be staffed by about 350 employees.

To realise the project, Micropower Group engaged a turnkey contractor, GBJ Bygg, a company with which they have successfully collaborated in the past. Together, they then carefully selected suppliers and subcontractors able to meet the strict project requirements. GARO has had the privilege of being involved in this project by providing the new plant with custom power supply solutions. This has been done in close concert with Växjö Elmontage, the subcontractor responsible for the electrical contracts, to meet the specific needs Micropower Group had during the construction phase.

"GARO is both flexible and dependable. A supplier with extensive experience that truly understands our needs and delivers custom solutions quickly and conveniently. In major projects such as this, it's important to have a large and stable partner like GARO, who you know will take responsibility even if things don't always go as planned. We've been collaborating with GARO for over 25 years, and we know that we can always rely on them. A reliance that offers peace of mind at all stages of the project," says Henrik Hammarström, project manager at Växjö Elmontage.

"Micropower Group's new factory is an amazing project that's extremely well-suited to GARO. We're incredibly happy to be able to contribute by securing the power supply for the new plant. We've delivered a number of different products within this project, from switchgear and distribution cabinets to cable cabinets and outlet boxes, to ensure safe and effective electricity distribution. It's a project strongly associated with electrification and the green transition, making it the perfect match for our own efforts to contribute to a more sustainable future," says Linus Nilsson, sales manager at GARO Montage, the company's assembly wing.

Sustainability in focus

Sustainability has been a guiding principle throughout the construction of Micropower Group's new plant. The new factory has been built with a strong focus on environmentally friendly solutions, as regards the choice of materials as well as the design of the building to minimise its energy consumption and carbon footprint. One of the most prominent examples of this comprises the climate-smart materials chosen for the building. For example, the office building, the design of which resembles the rotor in an electric motor, is built entirely from cross-laminated timber – a climate-smart choice that reduces carbon emissions.

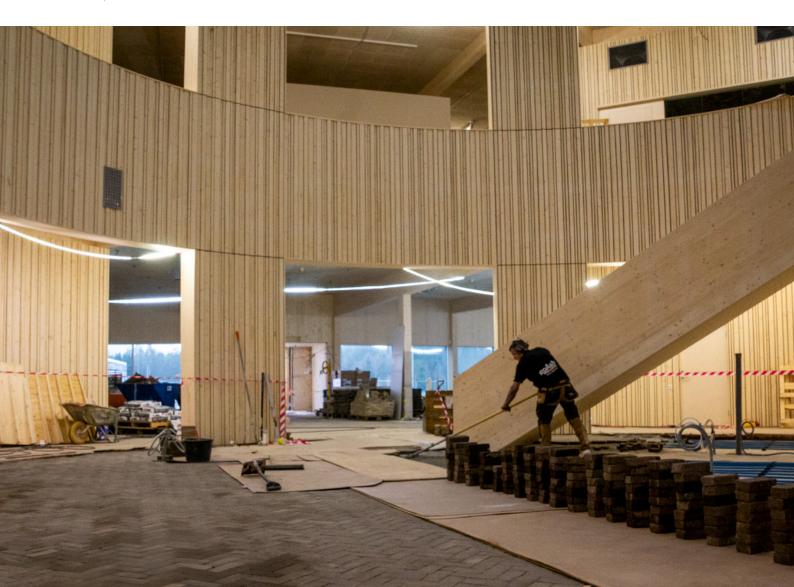
"Cross-laminated timber is an amazing material that offers both practical and environmental advantages. For instance, it weighs considerably less than concrete, making it easier to transport and handle on the construction site. Its production is also centred on a highly energy-efficient process, and the material binds carbon dioxide throughout its lifetime, making it an especially climate-friendly choice. What's more, it's a nice material to work with – it doesn't generate dust and is incredibly easy to assemble," says Andy Jonsson, works supervisor at GBJ Bygg.

Sven Olsson, project manager at Micropower Group, says that the sustainability aspect has been a given and particularly key part of the construction of the new plant. In addition to the office building being built with a wooden frame and many wooden components, the company has also chosen, for example, to invest in an extensive solar panel system on the roof and installed a smart heating system in the production halls.

"Sustainability is something that characterises every aspect of the new plant. We're striving to help meet the need for increased electrification and to reduce our own climate impact. Environmentally aware material choices, the solar panel installation and efficient heating solutions enable us to create the conditions for a more sustainable future. Our hope is that the solar panels will provide a relatively large share of our annual electricity consumption," says Sven Olsson, project manager at Micropower Group.

GARO, too, has a strong focus on sustainability and works purposefully to minimise any negative impact on both the environment and society. In this project, we have supplied Micropower Group with locally produced, robust and durable products that are designed to last, thereby contributing to long-term sustainability and reduced environmental impact.

"Here at GARO, we work with sustainability at all levels to ensure the right conditions for our projects. A focus on developing products and solutions for a sustainable future is a given for us. In this project, we've also had very short and efficient transport distances. From sheet metal forming in Gnosjö to finished products in Hillerstorp, where we assemble everything for delivery to Växjö, the products haven't travelled more than 100-150 kilometres in total. The short transport distance contributes to both lower environmental impact and faster deliveries," says Linus Nilsson, sales manager at GARO Montage.



Global goes local

The project is strongly characterised by well-considered and sustainable choices, including the choice of suppliers. Although Micropower Group is a large global player with several subsidiaries in different parts of the world, for the new plant in Växjö they have been very careful to choose suppliers and subcontractors with local ties.

"We've been an extremely active principal, including our involvement in the process to shortlist and select suppliers for the project together with GBJ Bygg. We've chosen to work with suppliers who are as local as possible, which is also an important part of our sustainability work. By partnering with local suppliers, we've been able to make environmentally aware choices to reduce transport needs and better facilitate communication. This results in a more efficient process and reduces the risk of doing things twice – the worst type of time wasting," says Sven Olsson, project manager at Micropower Group.

The partnership between GARO and Växjö Elmontage has also benefited in several ways from the geographic proximity between Gnosjö/Hillerstorp, where GARO is based, and Växjö. This close proximity has enabled fast and convenient logistics, with GARO being able to deliver materials with very short lead times when required. It has also facilitated regular physical meetings and visits to the construction site, enabling GARO to present details and solutions at the actual site together with Växjö Elmontage.

"GARO being a Swedish company and so geographically close to us have been huge advantages. For example, Linus has been able to drive here in just over an hour to deliver what we need in urgent situations, and such solutions are invaluable. The local support and service means we can quickly resolve any problems, ensuring an extremely smooth work flow," says Henrik Hammarström, project manager at Växjö Elmontage.



Flexibility and future-proofing

Another important aspect of the construction project has been flexibility, during both the construction phase and moving forwards. The construction phase has seen the need for certain adjustments and adaptations, such as to the electrical installations. This has entailed, for example, certain distribution cabinets being altered and some products being modified or supplemented to meet particular needs arising during the project. This has meant that GARO has had to respond quickly as a supplier to adapt to changing requirements.

"We knew there'd be many changes along the way, and GARO has been both responsive and flexible in meeting our needs. When distribution cabinets have needed to be redesigned and reconfigured before delivery, GARO has adapted and implemented the changes quickly. And for adjustments to distribution cabinets already installed on the site, they've offered to either come to the construction site themselves or, if it was particularly urgent, send complete kits with everything we needed to reconfigure them in place ourselves. This has made the entire process simple and effective," says Henrik Hammarström, project manager at Växjö Elmontage.

However, flexibility is not just about adapting to today's needs – the new plant is also designed to adapt to future requirements. To meet Micropower Group's expected expansion, GBJ Bygg has created a building with large, open spaces and many smart solutions.

"Micropower Group is a company that's growing incredibly fast, making flexibility a crucial element of the building design. It's been important to design a factory that's easily adapted to future needs. That's why, for example, we've built extremely large production halls with high ceilings and opted for a construction in which many of the internal walls are non-load-bearing. This makes it easy to dismantle, move and remodel building elements to meet new requirements and changes. It also makes the building a future-proof investment, enabling adaptations as operations expand," says Andy Jonsson, works supervisor at GBJ Bygg.

"Flexibility has been a central keyword throughout the project. The new plant provides us with an effective and flexible solution that enables continued growth, which is crucial given our rapid development and new product launches," comments Sven Olsson, project manager at Micropower Group.

Trusting and long-term relationships

Long-term and dependable partnerships have comprised a cornerstone in the success of the construction project for Micropower Group's new factory. Working with partners with whom you have already established trust creates a solid foundation for efficiency and quality. Several of the project partners have been selected for this very reason, as previous successful collaborations and favourable experiences have contributed to the decision to partner with them once again on this project.

There is a reason why GBJ Bygg was chosen to build Micropower Group's new factory. Namely, the fact that they were also involved in building the company's previous factory. The companies have enjoyed a long-term partnership and have worked in close concert to ensure the best possible solutions.

"For us, it was a given to work with GBJ Bygg again. This time, however, we've worked even more closely to ensure that we make the best possible decisions at every step of the way," says Sven Olsson, project manager at Micropower Group.

Andy Jonsson, works supervisor at GBJ Bygg, also emphasises the close collaboration with Micropower Group.

"We've worked extremely closely with Micropower Group. Although we're their turnkey contractor, we perhaps haven't really acted as a turnkey contractor in this project. Instead, we've worked together a great deal to ensure the best solution," says Andy Jonsson.

Växjö Elmontage was also involved in building Micropower Group's previous factory. Inviting them on this journey was a given.

"We knew that Växjö Elmontage would be a great partner on this project. It involves very many installations, not all of them straightforward, and Växjö Elmontage has resolved these challenges admirably. A partnership is even better when you know each other, when it involves companies you've worked with before and people you trust," says Andy Jonsson, works supervisor at GBJ Bygg.

The partnership between GARO and Växjö Elmontage also goes back many years. This means that they are well-acquainted with each other's work methods and expertise and know what the other partner wants. This ensures a partnership that is trusting and effective. Henrik Hammarström, project manager at Växjö Elmontage, reveals how well the partnership with GARO has worked and contributed to a fruitful work process.

"With such a lengthy partnership behind us, you understand each other without needing to say much. I also have a designated designer at GARO, Thomas. This is a great advantage as he knows exactly what I want. I'm a bit fussy about the designs and how distribution cabinets should be configured. But Thomas knows what I like and usually presents the perfect solution the first time around, so we save a great deal of time and the distribution cabinets are right from the get-go. This is extremely important as it saves time and prevents irritation," says Henrik Hammarström.

"It worked out well to offer Henrik a designated designer for this project. A lot of it comes down to relationships. If you have a designer who's done a great deal of work for you in the past, they're usually the person you want to contact if you need help or support in the future as well. All our sales staff and designers are listed on our website with direct numbers, so you can contact the person you feel comfortable with directly. There's no need to go via a project manager – we consider it a team effort," says Linus Nilsson, sales manager at GARO Montage.



From sketch to final solution

In an established partnership, many things are already known, such as work methods and preferences. This simplifies collaboration, with a simple pencil drawing on a piece of paper able to show how you want things, as is the case in the partnership between GARO and Växjö Elmontage.

"As the project has involved a great number of custom solutions, we've sometimes sketched solutions by hand and then given these pencil drawings to GARO. Things needn't be more complicated than that. It's amazing that something as simple as a sketch can become a finished distribution cabinet that's exactly as you want it. Thomas, our designer at GARO, has received the sketches, understood them straight off the bat and responded quickly to any questions. This has resulted in extremely short lead times. We save a great deal of time by quickly making simple sketches and speaking on the phone to create a final design ready for production. Custom solutions have comprised a key part of this project, and I'd happily say that GARO is extremely good at them," says Henrik Hammarström, project manager at Växjö Elmontage.

Linus Nilsson, sales manager at GARO Montage, also mentions the simplicity of the partnership with Växjö Elmontage. He describes it as an open and honest business relationship, one in which you keep your promises and deliver what you have offered.

"We're an all-inclusive supplier and they shouldn't need to buy anything else afterwards. We're completely transparent about what's included and they know that they get what they want, which has proven a great success. GARO is also a supplier whose parent company handles product development and manufacturing. We have our own workshop under the same brand as the products. This makes us unique and provides the customer with peace of mind. We also have long and solid experience, which simplifies every aspect of a project," says Linus Nilsson.

