

# meconet

Innovations are built together



**Battery racks**

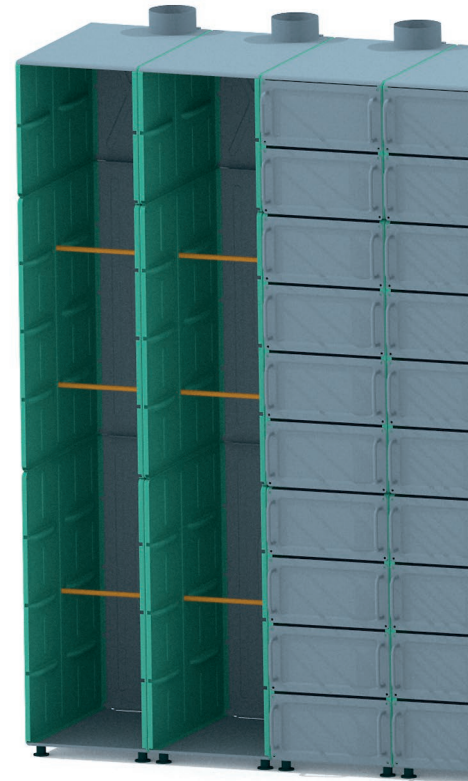
## **Can battery racks be 30 % lighter without losing strength?**

By reducing material thickness from 1.5 mm to 1.0 mm and using deep drawing with structural reinforcements, significant weight savings are possible without compromising rigidity. This means lower material costs, reduced CO<sub>2</sub> emissions, and improved sustainability.

Could this be the next step for your battery system?

# Sheet metal solutions for energy storage systems

At Meconet, we partner with industry leaders in energy storage, e-mobility, and industrial applications to provide high-quality and sustainable sheet metal solutions. Our expertise enables us to deliver precision-engineered components designed to meet the demanding requirements of modern energy storage systems. We support our customers with solutions that enhance safety, efficiency, and durability.



## Optimized energy storage rack solutions with deep drawing

Traditional energy storage racks are often assembled from multiple welded and bent sheet metal parts, adding weight and limiting design flexibility. At Meconet, we use deep drawing to create customized, high-performance solutions that enhance structural integrity, reduce material use, and integrate additional functionalities.

To complement our deep drawn racks, we also offer matching battery modules with deep drawn features. By integrating added stiffness, weight reduction, and functional enhancements into both the rack and module design, we can provide an optimized solution for energy storage systems.



## Stronger and lighter by design



Deep drawn racks and battery modules feature a seamless, monolithic structure, eliminating welds and reinforcing overall stiffness and durability. This results in higher mechanical strength and a longer service life while maintaining a lightweight design. At the same time, deep drawing allows for significant weight reduction, optimizing energy efficiency and improving handling across various applications.

## Integrated safety and functional features



Deep drawing enables the integration of additional functionalities directly into the design. For example, engineered venting channels can be incorporated to facilitate controlled gas release in the event of a battery thermal runaway, enhancing system safety without the need for extra components. The flexibility of our process also allows for fully customized solutions, adapting to specific customer requirements and incorporating functional elements such as mounting features, reinforcements, or cable management solutions directly into the structure.

## Faster assembly and easy maintenance



With fewer components and no welding, deep drawn racks enable faster, more cost-efficient assembly while improving overall reliability. The open and accessible design ensures easy servicing, making battery modules simpler to install, replace, and maintain—minimizing downtime and reducing operational costs.

By leveraging deep drawing and stamping, Meconet delivers tailor-made, high-performance battery rack solutions that meet the evolving demands of the energy storage industry – combining strength, weight optimization, and smart functionality in a single, efficient package.

# End-to-end expertise: from design to assembly

Meconet offers a comprehensive approach to contract manufacturing, supporting customers from the initial concept to full-scale production. Our services include:

- **Simulations & design support** – Early-stage collaboration with customers to optimize material use, weight reduction, and manufacturability.
- **Prototyping** – Fast and flexible prototype production to validate designs.
- **High-volume manufacturing** – Scalable production with state-of-the-art stamping and deep drawing technologies.
- **Flexible production for small & mid-sized volumes** – For smaller series or lower initial volumes, we offer laser-cut and press-brake-manufactured parts.
- **Assembly & sub-assemblies** – Integrating different manufacturing methods to provide fully or partially assembled components.

By combining our capabilities, we ensure that our customers receive cost-efficient, high-quality solutions that meet the stringent demands of modern energy storage systems.



Established  
**1896**



Turnover  
**61M€**



Experts & personnel  
**380**



Quality certified  
**IATF 16949**

Technologies

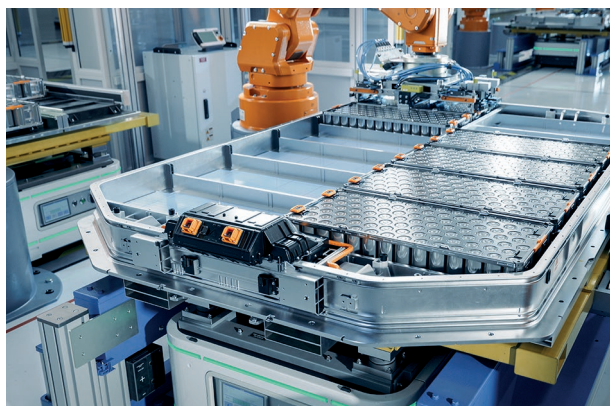
**Stamping**  
**Deep drawing**  
**Springs and wire-forms**  
**Assemblies**

## Beyond battery racks: additional solutions

In addition to battery racks, Meconet also offers:

- **Battery modules** – Optimized, efficient stamped solutions for improved performance and connectivity.
- **Suspension solutions** – Components designed to enhance system stability and vibration resistance.





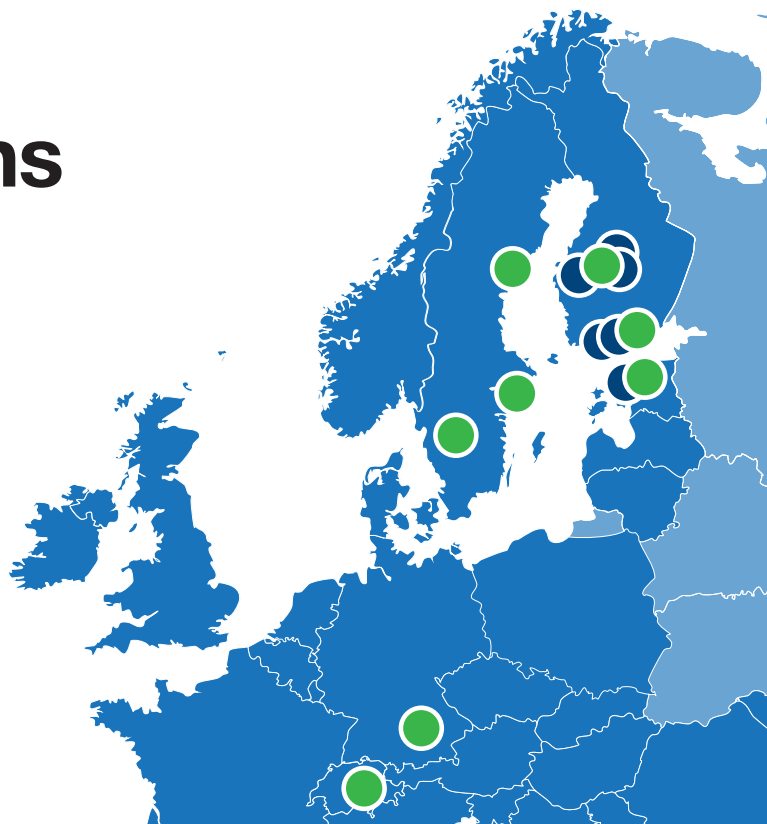
# Home of manufacturing

We are here to make the manufacturing of metal components smarter, more efficient, and truly sustainable – so you can focus on what matters the most: achieving your targets. With in-house proto and tooling capabilities, we provide tailored

solutions, from stamping and deep drawing to spring manufacturing and assemblies. We ensure that your components meet the demanding quality standards and are packed and delivered as agreed. With family business values and care.

# Meconet locations

- 6 factories
- 8 sales offices



## Let's build the future of energy storage together

Are you ready to optimize your energy storage solutions?  
Contact our expert team to learn how Meconet can support your projects with high-quality, sustainable sheet metal components.

### Contact us:

**Tomi Ropanen**  
Account Manager  
tomi.ropanen@meconet.net  
Tel: +41 76 608 4854

**Niklas Mäkinen**  
Account Manager  
niklas.makinen@meconet.net  
Tel: +49 175 371 3478

**Juha Martikainen**  
Technical Sales  
juha.martikainen@meconet.net  
Tel: +358 45 167 0630

[www.meconet.net](http://www.meconet.net)