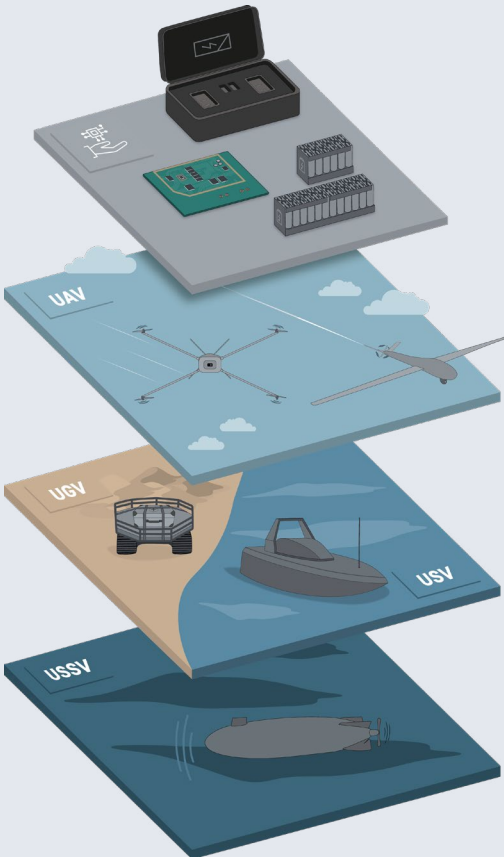

Customised Battery Concept

One concept. Many possibilities.

LIEBHERR

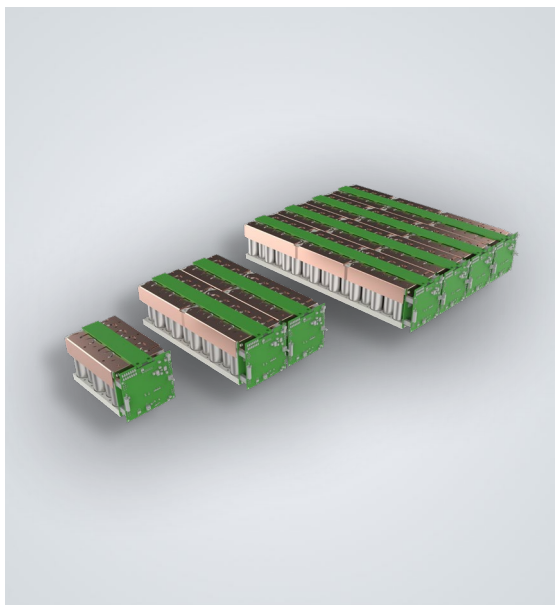
Components
Electronics Manufacturing Services



Your battery system. Customised developed.

With our Customised Battery Concept based on modern round cell technology, you receive a battery system that is perfectly tailored to your application.

As a reliable partner, we offer support throughout the entire process – from development and industrialisation through to series production.



Modular battery system

Can be realised in various sizes and designs



Modular. Scalable. High-performance.

Regardless of the starting point – a classic specification or in a joint workshop – we develop a well thought-out design for you based on our proven concept, and bring it to industrial implementation.

Through early prototype production and integration tests in the application, we gain valuable feedback and can optimise quickly and in a targeted manner. Our approach is consistently geared towards scalability and a short time-to-market – according to the principle:

Think big. Act small. Move fast.

We cover applications ranging from compact systems to high performance requirements. A clear technological approach takes centre stage: we consistently tailor our solutions to your needs and consciously reduce system complexity. According to the guiding principle **“simple beats complex”**.



The direct connection of the battery cell to the sheet metal package using a special laser process results in a particularly compact and efficient design. Additional heating foils, screw connections, wires or THT components are not required. This reduces the variety of parts and significantly simplifies assembly, resulting in noticeable cost savings.

In addition, the concept enables a high volumetric energy and power density and results in a thought-out design that harmonises performance, efficiency and industrial feasibility. **Development and production take place 100% in Germany.**

Depending on customer requirements, we also offer battery systems based on **pouch cell technology**.

TECHNICAL DATA





Battery charging system

If required, we develop a suitable charging system to complement the battery system, which is optimised both technically and functionally.

Precise charging profiles and continuous temperature monitoring provide targeted support for a longer battery service life. Integrated safety mechanisms protect against overcharging, overtemperature and incorrect operation. High-performance charging electronics enable short charging times with gentle treatment of the cell chemistry.

Direct communication between the battery and charger (e.g. CAN or UART) enables efficient control and continuous monitoring. The system is designed for industrial use and long-term high reliability. Depending on customer requirements, a protection class of up to IP67 can be achieved and the system can be designed to be correspondingly robust.

The battery and charging system form a harmonised comprehensive solution with:

- reduced integration effort
- reduced development time
- a central point of contact for support, safety and certification

Your benefits

01

Customised

A solution that is precisely tailored to your functional, installation space-related and thermal requirements.

02

Modular

The concept is based on proven, standardised design modules. This means it can be quickly integrated and flexibly customised.

03

Scalable

Your battery system is developed and industrialised in such a way that full or partial automation is possible on any scale.

04

Wireless

Maximum reliability thanks to wireless connection architecture – minimised susceptibility to interference and improved EMC performance.

05

No screws

High process reliability thanks to robust, vibration-proof design without screw connections – permanently stable and low-maintenance.

06

No THT

Consistently high product quality and efficient process chain thanks to automated SMT technology.



We look forward to hearing from you!

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