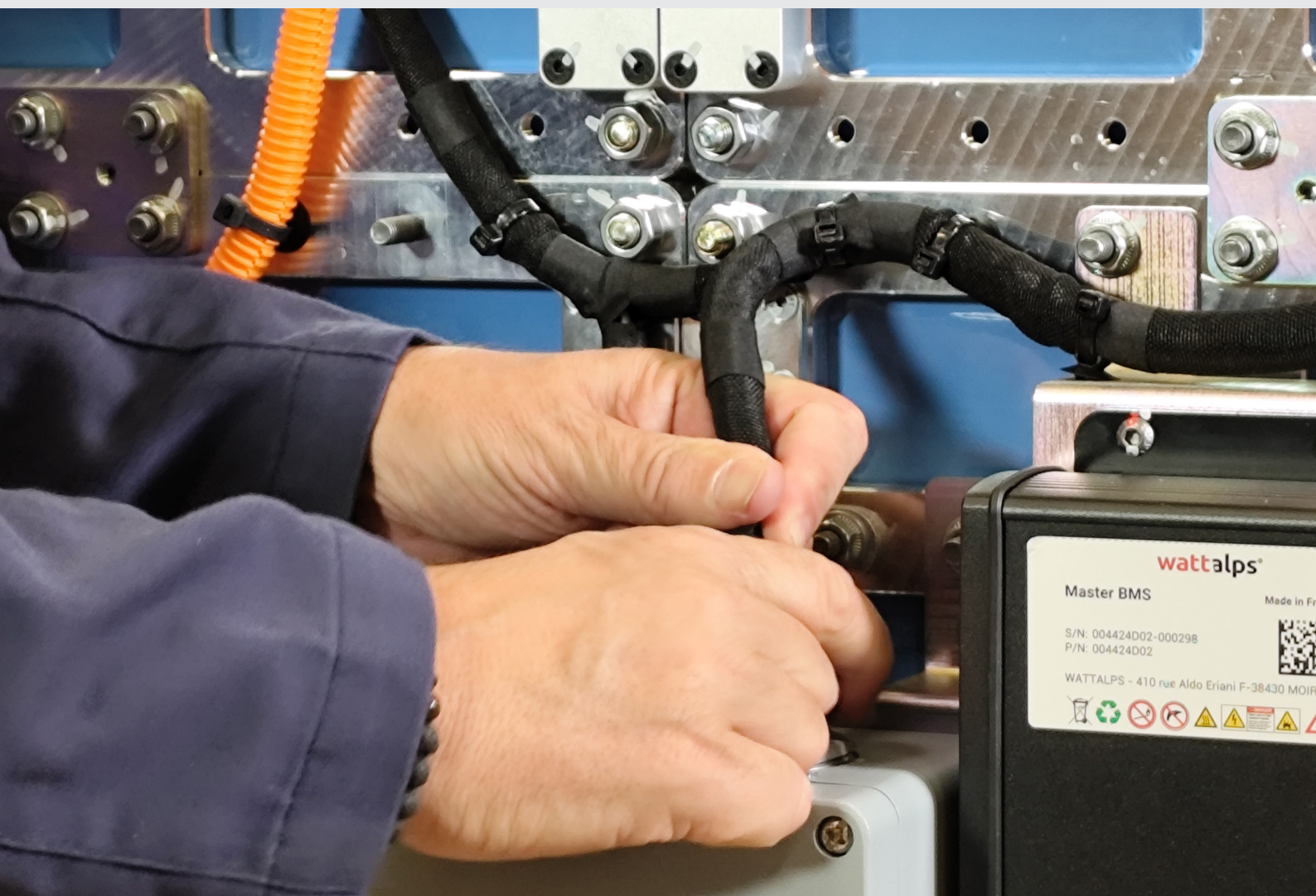


# wattalps®

## WATTALPS Support Services



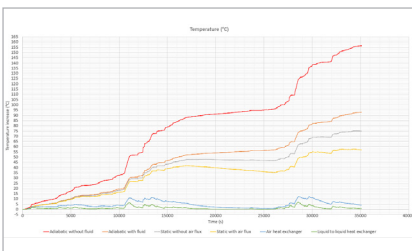
# Accompanying you to success

Together, we bring your vision to life, sustainably and efficiently.

At WATTALPS, our customers are at the heart of everything we do. We believe that strong partnerships are the foundation for turning bold ideas, hands-on experience, and expertise into shared success. That's why we support you throughout the entire battery life cycle—from the initial concept and design to end-of-life recycling.

## 1.

### Pre-sales services



From the start of the project, we put our expertise at your service to fully understand your specific needs and start defining the optimal solution for your application.

In particular, we conduct:

- electro-thermal simulations
- battery life assessments
- return-on-investment calculations, all tailored to your specific battery usage.

## 2.

### Battery integration study

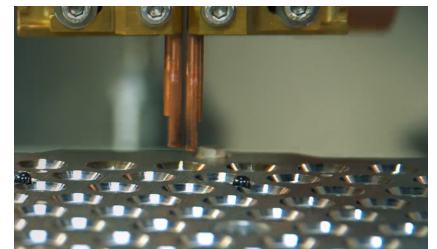


From initial risk assessments to final design validation, our engineering experts have years of experience designing battery systems for demanding applications.

We have developed a specific set of tools designed to deliver you with a customized solution in just a matter of weeks.

## 3.

### Production



Once your battery design is validated, your assigned project leader keeps you informed on a regular basis of the production stage of your battery, from manufacturing and testing to delivery.



4.

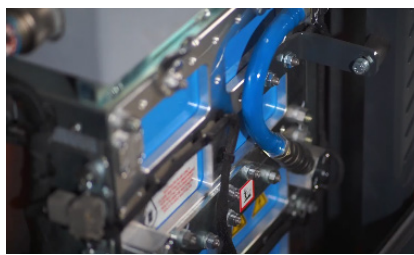
### On-site commissioning



On the day of commissioning, our battery experts come onsite to ensure proper installation and optimal performance of your WATTALPS battery system.

5.

### After-sales services



From training to step-by-step procedures, direct line support to onsite visits, we offer a comprehensive after-sales service for your batteries in operation. These are detailed in the next pages.

6.

### Battery end-of-life & recycling



Each WATTALPS battery is designed with sustainability in mind, allowing for reuse in second-life applications with lower performance demands.

When reuse is no longer feasible, WATTALPS provides recycling services for its own batteries to ensure responsible end-of-life management.

# Operate with confidence, your battery is taken care of

Your battery good operation is our prime goal. Our customer service is here for you.

From over-the-air monitoring and preventive maintenance, to remote or on-site support, our customer service is committed to ensuring you can rely on your WATTALPS battery, and receive timely, expert assistance from our engineers whenever needed.



## Support

*How to be sure that in case of battery failure they are quickly repaired for limited downtime?*

### Remote diagnosis

The BMS event history and detailed real-time status can be accessed over-the-air for remote diagnosis of your battery health, and to accelerate troubleshooting.

### Direct line support

We provide quick response time and worldwide technical on-line assistance.

### On-site intervention

For complex operations, our service experts are available for on-site intervention to ensure optimal performance and safety.

### Spare parts availability

We provide a detailed spare parts catalog for each battery configuration. This allows your Service teams to source, stock, and replace components, to ensure quick availability and minimal downtime.



## Battery SoH

*How can I monitor the batteries State of Health (SoH) and the way they are used?*

### Smart over-the-air monitoring

Our batteries are equipped with advanced connectivity features. Real-time monitoring can be performed over-the-air for remote health check, operational metrics, SoH and performance tracking.

## Maintenance

*Which preventive maintenance shall I forecast?*

### Minimal required maintenance

WATTALPS batteries are designed for minimal preventive maintenance. No fluid changes are required throughout the entire lifespan of the battery. Clear indications are available in your WATTALPS Manufacturer manual to perform preventive maintenance.

### Support toolkit

A set of support tools is available on request to help you perform some maintenance actions, such as a maintenance toolkit, a hydraulic level adjustment device, or some interactive tools for monitoring and support.

## A team of experts to support you

With 18 year professional experience on average, our enthusiastic team of experts combine their know-how and experience across various engineering fields such as electronics, software, hydraulics and mechanical engineering, to support you best and ensure the good operation of your batteries.

# Ensuring long-term excellence

We support you with the expertise, tools, and processes needed to ensure reliable performance over time.

Our approach combines training, continuous improvements, and proven quality standards to secure performance today and in the future.

## Training

*How to be sure I will have proper knowledge to operate my batteries?*

### Step-by-step procedures

Your battery is delivered with a 'Manufacturer manual' which is a key reference for your battery safe operation. Clear, step-by-step guides are also available for common battery operations to ensure smooth handling and maintenance.

### Knowledge transfer

During the battery study phase, our engineers work closely hand-in-hand with your teams, sharing knowledge and expertise on battery design and operation. Upon delivery of your first battery, a WATTALPS engineer comes on-site to provide you with the essential technical knowledge needed to operate your battery with confidence.

### Training

We also offer tailored training programs either directly for your teams or for your partner network. These can be first-level operational training, or more expert training courses for getting the full knowledge on battery technology fundamentals such as battery safety, cooling circuits or BMS.

## ISO Standards

Our after-sales service process is part of the processes audited and certified under ISO 9001. This certification reflects our strong commitment to quality, ensuring that our services and operations consistently meet the highest international standards.



« **We have built a close and trust-based collaboration with WATTALPS. We work directly with their experts, maintain a strong technical understanding, and benefit from their deep knowledge of real-world usage.**

**This partnership and know-how have enabled us to fully integrate WATTALPS' key technological building block and have a high level of confidence in how we use it »**

Matthieu Barbier, Technical Manager at Hyliko

## **Software upgrades**

*What about software upgrades?*

### **Software upgrades**

Software updates and new releases can be performed remotely. Our versioning & release management tool ensures that you always have the ultimate software for your operation.

## **Quality process**

*Which process for problem-solving?*

### **Root cause and continuous improvements**

We apply a robust quality management approach to effectively address issues and ensure customer satisfaction. Through structured methodologies such as Customer Non-conformity and 8D problem solving, each issue is thoroughly analyzed to identify its root cause.

Corrective and preventive actions are systematically implemented. This drives continuous improvement, ensuring fast resolution and long-term reliability.

# Battery Lifetime & Performance Services

## Real-world aging: beyond laboratory conditions

Battery aging in real-world conditions is never identical to laboratory results. By combining precise lifetime modeling with flexible contract options, we ensure that your battery solution is both reliable and aligned with your operational needs.

Battery aging is influenced by several critical factors, including the operating temperature, the Depth of discharge and the charging rate of your battery.

Because of these variables, battery lifetime can vary significantly from one application to another, typically ranging from around 1 000 cycles to up to 30 000 cycles, depending on operating conditions.

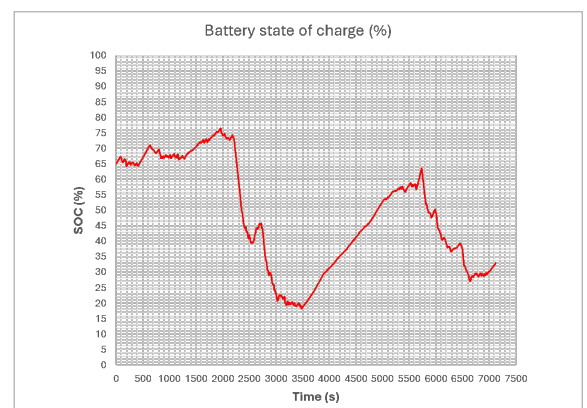
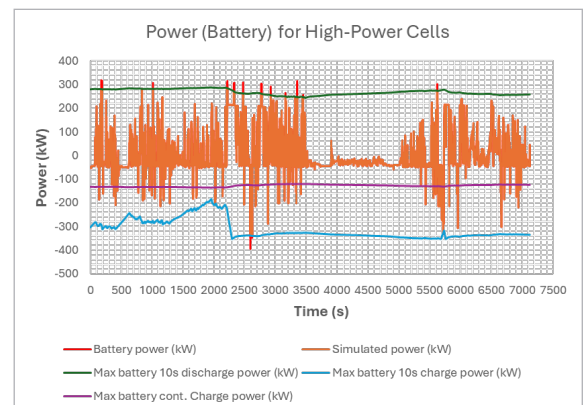
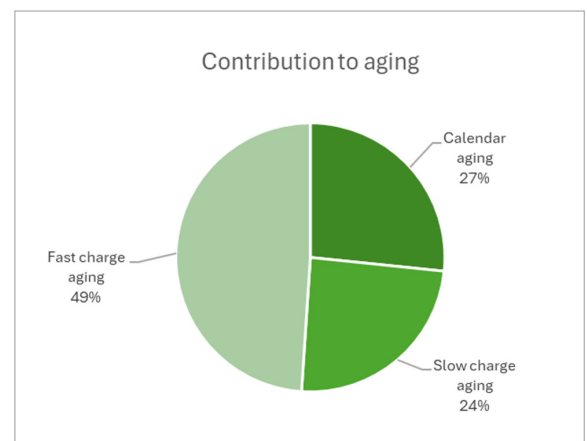
To address this complexity,

1. We have developed advanced simulation tools that accurately model battery behavior under your real operating conditions.
2. Our warranty and service offerings are fully customized based on how your battery is used.

## Electro-thermal simulations and battery life assessment tailored to your specific usage

We have developed advanced simulation tools that accurately model battery behavior under your real operating conditions.

These tools enable a high level of lifetime prediction, helping you anticipate performance, optimize design, and reduce operational risk.





## Tailored Warranty & Performance Contracts

We support a wide range of applications, and each project has unique requirements. That is why our warranty and service offerings are fully customized based on how your battery is used.

While the standard warranty covers parts and manufacturing defects, the performance contract ensures that your battery consistently operates at the agreed performance level.

### Standard Warranty

- Covers parts and manufacturing defects
- 12 months standard duration, starting up to 6 months after delivery
- Extension options available
- Please consult our General terms and conditions of sales for detailed information.

### Performance Contract

- Focused on battery aging and long-term performance
- Defined according to your specific application profile from the electro-thermal simulations and battery life assessments which we conduct at the beginning of the project
- Coverage typically ranges from 3 to 10 years

« **The support from WATTALPS' experts has been a key to optimize the machine performance and make sure that it will deliver at its best in all conditions** »

Christopher Shue  
Project Engineer at VERMEER

Any question?  
Just contact us!

## **WATTALPS**

410 avenue Aldo Eriani  
38430 Moirans - France  
+ 33 4 58 00 54 91

[sales@wattalps.com](mailto:sales@wattalps.com)  
[aftersales@wattalps.com](mailto:aftersales@wattalps.com)

[www.wattalps.com](http://www.wattalps.com)



**wattalps**<sup>®</sup>