






Testing of energy storage

YOUR PARTNER FOR

-  Engineering
-  Simulation
-  Testing



TESTING OF ENERGY STORAGE

Modern energy storage systems have become an indispensable part of our daily life. Whether in areas of mobility, energy storage for on-demand power supply or applications in rail and air transport - the number of applications and the associated quality and market requirements are constantly growing. Comprehensive tests are necessary to ensure the safety and function of batteries already during production.

PTS-Prüftechnik accompanies the entire development process of an energy storage system with a wide range of testing services. The range of services includes performance testing under extreme climatic conditions (from **-70 °C** to **+140 °C**), verification of service life and characterization testing of electrical parameters such as charge and energy efficiency. In this way, we achieve meaningful and reproducible results through extensive testing in order to identify optimization potential and significantly reduce development time and costs.

Competencies

Lifetime & reliability tests

- Lifetime testing
- Analysis of cyclical aging

Performance testing

- Determination of the battery capacity
- Investigation of the cold start properties

Environmental simulation & thermal conditioning

- High Temperature Operating Endurance (HTOE)
- Powered Thermal Cycle Endurance (PTCE)
- Cooling and heating of battery systems

Technology and infrastructure

Battery cells

- Output voltage: 0 - 5 V
- Output current: up to 1,200 A

Battery modules

- Output voltage: 0 - 130 V
- Output current: up to 1,000 A

Battery packs

- Output voltage: 0 - 1,000 V
- Output current: 0 - 2,400 A
- Power: over 1,000 kW

TOGETHER INTO THE CO₂-NEUTRAL FUTURE!