



Choose certainty.
Add value.

Battery abuse testing

Ensure your batteries meet the highest standards.



Our abuse testing services

TÜV SÜD is a leading global expert in testing battery cells, modules and packs. Our abuse testing services help customers to design and manufacture products that meet the highest levels of safety and quality, in line with industry and regulatory requirements. With our advanced, fully equipped facilities, we are able to simulate extreme environmental conditions and scenarios to test your battery beyond its limits. Our range of safety tests includes but is not limited to:

- Nail penetration
- Overcharge / over discharge
- Short circuit
- Thermal stability
- Cycling without active cooling
- Crush / crash
- Drop
- Fire
- Immersion
- Gas analysis

Our services are applicable to an extensive range of applications such as electric vehicles, stationary batteries, rail and marine applications, 2-wheel vehicles, grid storage, grid balancing, backup applications, uninterruptable power supplies (UPS), e-bikes, off-road and aerospace.

Your business benefits

- **Stay ahead of developments** – with global experts who are at the forefront of the electrical energy storage industry and can help you meet customer and regulatory safety requirements.
- **Benefit from a single-source provider** – for testing and certification that extends through the entire value chain, from component to final product.
- **Gain customer confidence** – by leveraging on TÜV SÜD's reputation as the preferred third-party testing partner.
- **Save time and money** – with reliable tests that reduce warranty claims, time to market and R&D activities.



Why choose TÜV SÜD?

TÜV SÜD is a trusted battery test expert with extensive experience in this field. Our holistic approach and commitment to safety will optimise the reliability of electrical energy storage products. We are known the world over as a neutral and independent third-party technical service provider, and our accredited testing services can add value to your brand.



Our expanding network of laboratories throughout North America, Germany, China, Korea and Singapore is ready to serve the needs of customers. This global testing network provides the full range of testing services and validation planning. Our advanced, fully equipped facilities allow you to test various battery failure scenarios in a safe and controlled environment.

We deliver highly responsive customer-focused service, with flexible scheduling based on your requirements. In addition to offering the capability to perform abuse testing, we also help you to understand the proper testing methods and regulations, and assist you in interpreting the test results.

Choose certainty. Add value.

TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in testing, inspection, auditing, certification, training and knowledge services. Represented in over 800 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East and Asia. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

Related services

TÜV SÜD provides the following related services:

- Lifecycle testing
- Performance testing
- Environmental and durability testing
- Transport testing according to UN 38.3
- High voltage and electrical safety training
- Homologation services
- Drive cycle simulation
- Charging infrastructure services