



Choose certainty.
Add value.

Battery testing

Development and validation testing to current and emerging standards



Our testing services

TÜV SÜD is a leading global expert in testing battery cells, modules and packs. We offer testing services to ensure that your product meets the highest levels of quality and safety. Our services are applicable to an extensive range of applications such as electric vehicles, stationary battery, rail and marine applications, 2-wheel vehicles, grid storage, grid balancing, backup applications, uninterruptable power supplies (UPS), e-bikes, off-road, and aerospace.

■ Life cycle testing

Verify how long a battery lasts and demonstrate the quality of the product to customers. These tests include cycle life testing, environmental cycle testing and calendar life testing.

■ Abuse testing

Simulate extreme environmental conditions and scenarios to test your battery beyond its limits.

■ Performance testing

Demonstrate the efficiency of batteries. Our experts can customise testing programmes to suit specific customer requirements such as performance testing under various climatic conditions.

■ Environmental and durability testing

Demonstrate the quality and reliability of your battery. Our tests include vibration, shock, EMC, thermal cycling, corrosion, dust, salt and humidity tests.

■ Transport testing

Ensure your batteries can be transported safely. We conduct tests for the United Nations requirements (UN 38.3) for the safe transportation of lithium batteries.



Your business benefits

- **Stay ahead of developments** – with experts who are at the forefront of the rechargeable battery industry.
- **Benefit from a single-source provider** – for testing and certification, extending 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.
- **Enhance credibility** – by working with a premium quality provider.

Global test standards

Batteries are tested at all levels, with tests that cover investigations such as electrical, chemical, corrosive, mechanical and abuse. The standards that we test to include, but are not limited to:

- DOE/ID-11069
- DOE/ID-11173
- IEC 62660-1/2
- IEC 62133
- ISO 12405-1/2
- SAE J2464
- SAND 2005-3123
- SBA S1101
- UN 38.3

Why choose TÜV SÜD?

TÜV SÜD is the trusted battery testing expert. Our holistic approach and commitment to safety will optimise the reliability of battery and other energy storage

devices products. Through our expanding network of laboratories throughout North America, Germany, China, Korea and Singapore, we are ready to serve the needs of customers. This global testing network provides the full range of testing services and validation planning.

We are known as a neutral and independent third-party technical service provider, with a focus on delivering value to stakeholders rather than shareholders. TÜV SÜD has a global network of experts you can rely on for international market access and in-country experience. Our interdisciplinary expertise will add value to your product development.

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:

- Charging infrastructure services
- Drive cycle simulation
- High voltage and electrical safety training
- Homologation services
- Whole vehicle eSafety services