



# Energy Storage/Battery Testing & Advisory Services



How do you ensure that your power source meets your customers' expectations? From hybrid electric vehicles to personal electronics to renewable energy, Intertek has a depth of experience ensuring batteries and energy storage technologies meet performance, reliability and safety criteria.



To meet the rapidly evolving needs of manufacturers and OEMs, Intertek continues the expansion of its global energy storage testing facilities and advisory expertise. Intertek, which now includes world-renown Sagentia Catella, offers industry-leading, independent consulting and testing for batteries, fuel cells and supercapacitors. Capabilities range from coin cell evaluations to full pack EV/HEV batteries for automotive applications. We are ISO 17025 accredited.



We assess more than 20 000 batteries each year, covering all chemistries and sizes. Manufacturers, retailers and application experts benefit from our more than 50 years of experience.

## Testing Services

- Performance testing
- Electrical Abuse
- Mechanical Abuse
- Environmental
- Fire Endurance

## Battery Performance Testing Capabilities

- 2 000 primary battery test positions
- 400 low / mid power rechargeable battery test positions
- 30 high power rechargeable battery test positions
- Customized test positions for device testing
- 2 full pack EV/HEV capable teststands

Key services include:

- Independent battery performance and product safety testing
- Assessment and selection of best fit solutions for OEM devices
- Reliability, safety, and failure analysis

### **Advisory Services**

- Specification development
- Test program development
- Reliability, safety and failure investigations, including FMEA
- Manufacturing plant audits
- Prototype evaluations
- Supplier assessments
- Warranty investigations
- Material identification, properties
- Modeling and simulations
- HALT/HASS accelerated life/ stress
- Investor due-diligence
- Technology road mapping
- Training and courses
- Consulting services (multi faceted)

### **Comprehensive safety certification**

Intertek tests to national, international and industry-specific standards, such as:

- ANSI/UL 1642
- ANSI/UL 2054
- IEC60086-1, 60086-2, 60086-3
- IEC 62133
- IEEE 1625, 1725
- IEC61851, 61951, 61960, 62196
- UL 2202, UL 2231, UL 2251
- ANSI C18.1 Part 1, ANSI C18.3 Part 1
- USABC FreedomCAR
- UN transportation (38.3 T1-T8)
- SAND99-0497
- SAE J2464 EVB
- Other regulatory and OEM specific
- Nordic Ecolabel (White Swan)

### **Examples of assignments include:**

- Performance testing of consumer batteries to substantiate claims in marketing campaigns
- Performance and safety testing of consumer batteries for major retailers
- Cellular phone battery qualification
- Evaluating lithium batteries for hybrid electric vehicles
- Investigating and evaluating the root cause of accidents related to battery technology; cellular phone, UPS systems, consumer products, military equipment abuses
- Assessing battery systems for several medical applications: cardiac equipment, anesthesia equipment, dispensing devices and hearing aids
- Developing a roadmap of power requirements & power source solutions for the 21st century battlefield
- Performance characterization of portable PEM and DMFC fuel cells
- Expert advice in a residential fuel cell demonstration project
- Evaluating supercapacitors for military applications
- Due diligence for private investment in portable energy start-ups
- Safety Plus Services (integration of battery, device, charger and controltesting)
- On-site engineering management of product development efforts

For more information please visit [www.intertek.com](http://www.intertek.com) or contact us at [icenter@intertek.com](mailto:icenter@intertek.com), or call us +1 800 967 5352.

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