Battery Testing and Inspection Equipment Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 100 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

The Battery Testing and Inspection Equipment Market is expected to register a CAGR of 4.7% during the forecast period. Safety is an essential aspect of the testing process since it mitigates reliability risks for the device. Batteries power many devices and technologies consumers depend upon daily, from smartphones and tablets to electric vehicles. For this purpose, batteries must undergo rigorous testing before coming to the market.

Key Highlights
Testing batteries in high temperatures help to determine at what point they combust, melt, create thermal tensions, and perform. Companies in this sphere conduct battery testing to ensure safety and set consumer expectations.
The market demand for electric vehicles continues to increase around the world. Electric cars are propelled by large motors powered by a rechargeable onboard battery system. Lithium-ion batteries remain the dominant choice for electric vehicle production.
The Indian government, in July 2022, stated that in the middle of increasing instances of fires in EVs getting reported from parts of the country, the government had stepped in with a plan to formulate procedures for battery testing, certification, and quality control. The committee will ensure to suggest ways for the excellent quality of the product. Manufacturers must develop SOPs to test and validate crucial components and formulate a testing and certification standard for EV batteries.
India's Union government is on the verge of releasing standards for electric vehicle batteries after more than a dozen recent incidents of electric scooters catching fire, resulting in at least five deaths. The policy will cover performance testing, manufacturing standards, and battery heat resistance. According to the Union government on April 2022, decarbonizing transport and the transition to clean mobility, led by EVs, is paramount, thus driving the demand for the battery testing and inspection equipment market.
The National Battery Testing Centre At The Queensland University Of Technology, including USD 15 million in funding, tests

multiple sizes and types of battery systems in real-world conditions for Australian applications.
All businesses globally with crucial assets for manufacturing goods and services have experienced a rapid decline due to the pandemic. The management of such companies has been under extreme urgency and panic, putting more emphasis on cutting costs. Since manufacturing activity is low, companies got tempted to eliminate maintenance, resulting in high prices in the coming future.? Due to the COVID-19 pandemic, the global supply chain and demand for battery testing and inspection equipment were disrupted, severely impacting market adoption. Due to the production shutdown, countries globally have observed a shortage of battery testing and inspection equipment during the pandemic.

Battery Testing & Inspection Equipment Market Trends

Automotive Industry to Hold Significant Market Share

The battery is an essential component of the electric vehicle. As demand for electric cars and vehicles increases, manufacturers using high-voltage batteries ensure international safety, reliability, endurance, and performance standards.
With the continuous advancement of construction and the support of governments worldwide, the development of low-energy-consuming, pollution-free electric vehicles is rapid. Lithium-ion batteries are widely used in electric cars due to their superior characteristics.
As the battery development as the core energy source of electric vehicles has accelerated, major battery companies and automotive OEMs have turned to rigorous testing. The testing includes design verification (DV), standard operating procedure (SOP), and production verification (PV) phase verification to ensure high mileage and safety.
EV demand is driving the future of the automotive industry. The success rate in this fast-paced, high-voltage, high-power transition to EVs requires readily available, safe, flexible, and accurate test equipment. According to the MORTH (Ministry of Road Transport and Highways), considerable assistance has been taken from the UN ECE R136 procedure, implying that the tests are in line with international standards. According to MoRTH and the UN-published documents, most of the test descriptions in AIS-156 are identical to the UN ECE R136 in June 2022.
According to the SMEV (Society of Manufacturers of Electric Vehicles) in India, the total number of electric vehicles sold across India was around 144 thousand in the two-wheeler segment in September 2021. The Indian government is enhancing e-mobility in the country. The sales of two-wheeler electric vehicles have multiplied by about seven times in the past five years.

Asia-Pacific to Witness Significant Growth

Battery testing and inspection equipment have applications in multiple use cases, such as automotive, consumer electronics, and others. In the automotive sector, battery testing is mandatory to verify the battery's durability against harsh conditions resulting from shipping and everyday usage to ensure safe operation. Many countries in the Asia-Pacific region are following stringent government regulations for battery testing and inspection equipment.
Anticipating a rise in demand for electric vehicles (EV), the government's National Testing House (NTH) of India, In December 2022, said it would offer testing services for EV batteries and charging systems at its Mumbai and Kolkata centers from the next fiscal. Such an increase in the demand for the automotive sector is expected to contribute to the demand for the battery testing and inspection equipment market in India.
Mobile devices have become essential tools for business and leisure. The safety, efficiency, and reliability of the batteries that power cell phones and other devices play a crucial role in continued market growth. In China, the primary factor driving the demand for the market is an increase in outsourcing of testing, inspection, and certification services by significant companies operating in the consumer goods application areas.

Several market players in china are opening testing centers for consumer electronics in China. For instance, In August 2022, Henkel officially opened its South China Application Engineering Center (SCAEC) in China. With its first engineering center for electronics applications in the region, the company aims to enhance the support of Chinese consumer electronics customers. Housing advanced testing, analytical and research labs, and joint development labs, the state-of-the-art facility is designed to expedite the development of next-generation consumer electronic products and empower industry innovation. Such developments drive the demand for the battery testing and inspection equipment market.

Battery Testing & Inspection Equipment Market Competitor Analysis

The Battery Testing and Inspection Equipment Market is very competitive. The market is highly concentrated due to various small and large players. Some of the significant players in the market are Arbin Instruments, Neware Battery Testers, Hioki USA, Megger, Chroma Systems Solutions, Inc., A&D Technology, Midtronics, Inc., and many more.

September 2022 - Keysight Technologies have collaborated with Jiyun technologies to develop and deliver a tailored, compact battery test system for EVs. New electric vehicles are increasing, and batteries, as the heart of electric cars, are considered. Keysight Technologies delivered the tailored battery test system to Jiyun Technologies. The test software leveraged in the battery test system was adopted from Keysight's PathWave software portfolio. The custom test system can reach a current level of up to 540 Amp, a maximum output voltage of 1000 V, and a top power level of 180 kW.

November 2021 - Keysight Technologies, Inc. and Proventia Oy collaborated to improve EV battery test solutions. The collaboration between Keysight and Proventia delivers a location-independent and safe test lab with rapid implementation time. Keysight's Scienlab battery test solutions, including the SL1700A series Scienlab Battery test system, pack level test high-voltage batteries with up to 1500 V. The test solution addresses safety concerns with features including redundant measurement and utilizes new high-voltage silicon carbide (SiC) technology allowing an energy recovery capability of 96%.

Additional Benefits:

The market estimate (ME) sheet in Excel format
3 months of analyst support

Table of Contents:

Battery Testing and Inspection Equipment Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 100 pages | Mordor Intelligence

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-03-02
		Signature