

Quality assurance battery cabinet production

What is quality-oriented production planning in Assembly of battery modules?

A tool for quality-oriented production planning in assembly of battery modules was developed by , defining critical product and process characteristics and deriving appropriate quality assurance systems using a measurement equipment catalogue.

What is Quality Management in lithium ion battery production?

Quality management for complex process chains Due to the complexity of the production chain for lithium-ion battery production, classical tools of quality management in production, such as statistical process control (SPC), process capability indices and design of experiments (DoE) soon reach their limits of applicability.

Why is battery quality so important?

Poor battery quality can lead to major safety and reliability issues in the field in applications including consumer electronics [1,2], electric vehicles [3,4], aviation , and more. However, detecting latent cell defects --which are responsible for these battery quality issues--during production is notoriously challenging.

Is high-throughput CT scanning a good solution for battery QC?

While no single method offers a perfect solution, we believe high-throughput CT scanning stands out as an especially promising and impactful technique for battery QC. Glimpse is a Boston-based startup pioneering high-throughput CT scanning for battery quality control by solving CT scanning's two major bottlenecks: scan time and analysis time.

What are the pros and cons of battery QC?

This technique is often combined with digital photography. While dissection is a standard procedure in battery QC,this method is (obviously) destructive as well as quite labor-intensive and slow. Pros: High-resolution,detailed views into internal cell structures. Cons: Destructive,labor-intensive,and slow (~hours).

Are quality management tools limiting the production chain of lithium-ion cells?

It has been shown that current quality management tools easily face their limitswhen applied to the production chain of lithium-ion cells due to its complexity and the need for real time processing of collected data.



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