

How can a battery production system improve traceability?

With the elimination of identification and information gaps between the process clusters, traceability of battery components and process steps up to the finished product can be realized in current and future battery production systems.

What is a traceability concept in battery production?

Instead, there are isolated and very specific approaches described in literature for dedicated products. Starting from these basic approaches, a traceability concept with focus on identification technologies was developed. Additionally, it was morphologically evaluated for each process cluster and trace object within battery production.

How to ensure the traceability of a battery cell?

In order to guarantee the traceability of the individual components and process steps to the finished battery cell, the information of the electrode foil must be linked to the case of the individual cell.

What is a traceability system?

State of the art 3.1. Traceability system A traceability system includes both forward tracking and backward tracing within the value chain. It collects information from trace objects along phases of the product life cycle. Trace objects are the units that are tracked during an entire production process or from a specific processing step.

What is a battery recovery code?

The battery recovery code itself is a series of numbers and letters combined with codes for managing power battery information collection during the collection, disassembly, classification, step utilization, metal recycling, resource regeneration, and waste disposal processes [70].

Does a power battery product code need to be retained?

It should be noted that for the cascade utilization products, the original power battery product code needs to be retained. The standard does not specify the information to be included in the traceability information code, nor does it unify the coding rules of this part of the code.

The serial number requested is just for traceability purpose. Any 10 digit number can be applied. The following example shows a battery coding in a Skoda KODIAQ 1.5 TSI using a BOSCH KTS diagnostic device. After vehicle ...

AMA Style. Ding Y, Zheng D, Niu X. Collaborative Green Innovation of Livestock Product Three-Level Supply Chain Traceability System: A Value Co-Creation Perspective.

This DC-coupled storage system is scalable so that you can provide 9 kilowatt-hours (kWh) of capacity up to 18 kilowatt-hours per battery cabinet for flexible installation options.

Extract of the traceability route along the manufacturing chain based on the Ontology-based Traceability System the processing condition (e.g. time, energy consumption), the evolving quality of the product (e.g. intermediate product Ontology-based data model Trace-Object âEUR" virtual Battery Cell Energy Efficiency Strategies Waste per Process Data origin ...

Design of Aquatic Product Traceability Coding Scheme Based on EPC Label Qiaohong Zu1, Ping Zhou1(B), and Xiaomin Zhang2 1 School of Logistics Engineering, Wuhan University of Technology, Wuhan 430061, China 1113089750@qq 2 Guangzhou East Railway Automobile Logistics Co. LTD, Guangzhou 510800, China Abstract. Aiming at the existing ...

2 EPC-Based Aquatic Products Traceability System Electronic Product Code (EPC) is a product electronic coding system developed by the United States Auto-ID Center. This system will replace the bar codes in the radio frequency identification system. EPC consists of the title description area and three data zones. Title Description data area is ...

A traceability system serves as an enabler for generating a Digital Product Twin. Through a customized solution, data can be clearly assigned to an individual product throughout the ...

126 Günther Rieger et al. / Procedia CIRP 93 (2020) 125-130 2 Author name / Procedia CIRP 00 (2019) 000-000 The goal is a traceability system that connects production data and real ...

Against this background, this work describes the implementation of a traceability system as part of QMS for battery cell production and presents a developed framework ...

Highlights o Key factors affecting power battery recycling was put forward. o Finding coding issues is the core of all factors that affect recyclable traceability. o Car code, ...

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