

SolarTech Power Solutions

Is the new energy battery cabinet made of aluminum alloy



Overview

The new energy power battery shells on the market are mainly square in shape, usually made of 3003 aluminum alloy using hot rolled deep drawing process. Are aluminum battery enclosures a good choice?

Aluminum battery enclosures typically deliver a weight savings of 40% compared to an equivalent steel design. According to Asfeth, the alloys best suited for battery enclosures are the 6000-series Al-Si-Mg-Cu family — alloys that are also highly compatible with end-of-life recycling, he said.

What are energy power battery shells made of?

The new energy power battery shells on the market are mainly square in shape, usually made of 3003 aluminum alloy using hot rolled deep drawing process. Depending on the design requirements of the power battery, the thickness and width can be customized.

Are aluminum battery enclosures recyclable?

Aluminum battery enclosures or other platform parts typically gives a weight saving of 40% compared to an equivalent steel design. Aluminum is infinitely recyclable with zero loss of properties. At end of life 96% of automotive aluminum content is recycled. Recycling aluminum only requires 5% of the energy needed for primary production.

What material is used in power battery aluminum trays?

Chalco's production of power battery aluminum trays mostly uses 6-series 6061 aluminum plate as the raw material for battery aluminum trays, which can meet the characteristics of high precision, corrosion resistance, high temperature resistance, and impact resistance to protect the battery core.

Which aluminum alloy is used in power batteries?

Aluminum alloy is a commonly used material for power batteries, and there is an urgent need to focus on research, development, and upgrading of products

and alloy materials. At present, the conventional aluminum alloys used in power batteries mainly include 1-series, 3-series, 5-series, and 6-series.

What are the advantages of aluminum frame & aluminum plate structure battery shell?

The aluminum alloy frame and aluminum plate structure battery shell have flexible structural design, obvious weight reduction and mature technology. The extruded aluminum frame can provide high rigidity and high strength, and the aluminum plate stamping parts are sealed.

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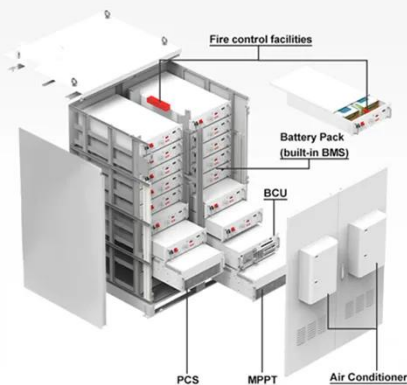


Structural composition of energy storage cabinet

The battery energy storage system is installed in a container-type structure, with built-in monitoring system, automatic fire protection system, temperature control system, energy ...

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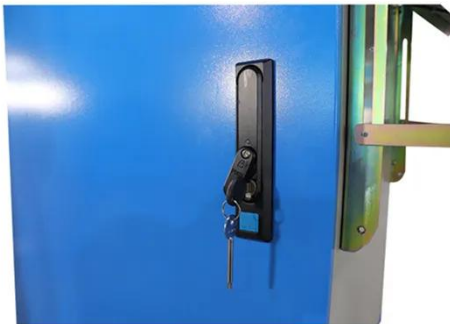
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Battery aluminum tray, aluminum for new energy



vehicles

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