Technical requirements for battery module aluminum end plates

What are the advantages of aluminum profile battery box?
The aluminum profile battery box for the electric automobile is reasonable in structure, high in corrosion resistance and convenient to produce and machine, the machining cost is reduced, and the strength and the energy density of the box body are improved.

What is a battery module comprising cartridge having gripping parts?
US10586952-- BATTERY MODULE COMPRISING CARTRIDGE HAVING GRIPPING PART -- LG Chem Ltd. (Korea) -- The present invention relates to a battery module including a cartridge having gripping parts formed on the inner surface of the frame member thereof to mount battery cells in position.

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 recyclablewith 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 is the best material for a BEV battery enclosure?
Aluminumas sheet and extruded profiles is the preferred material for BEV body structure,closures and battery enclosures. 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.

What is a battery upset frame?
Part of the body which is used for the storage battery,the battery upset frame body comprises the welding of a plurality of lapped aluminum alloys in proper order,battery box cover plate includes inner panel and planking,adopts double -deck aluminum alloy punching press to form.

What is a battery cell support assembly?
US10566588 -- BATTERY CELL SUPPORT ASSEMBLY -- Ford Global Technologies,LLC (USA) -- An exemplary support assembly for a battery array includes,among other things,a frame and an insert secured to the frame. The insert is configured to hold at least one battery cell within the frame.

A module consists of two end plates, fixed on both sides of the battery. Model: Die-cast end plate with plastic spraying or sandblasting. Material: 1965 series aluminum, 6063 series aluminum, ...

Our team speaks to our work on solutions for EV battery module end plates. These solutions are based on ongoing activities under our BLUEHERO(TM) initiative - d...

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The present disclosure relates to a composite end plate and a battery module. The composite end plate comprises a rigid substrate, which has a first surface and a second surface that are opposite in a thickness direction of the rigid substrate, the first surface is disposed facing batteries; a rigid connecting plate, which comprises a connecting portion and a hook portion that is bent toward ...

Function: used to fix multiple batteries, one module has two end plates.Specifications and models :two types of aluminum profile end plate and die-cast aluminum end plate itable for 280AH batterymodule. Material: ...

Here are examples of application cases of Asahi Kasei Engineering Plastics products in Battery. You can check the grade and features from the details of each application. If you have any questions, please contact us.

The present application relates to the field of battery production techniques and, particularly relates to an end plate for battery module and a battery module. The end plate...

Lithium battery module end plate side plate The casing of a traditional battery module mainly includes a pair of side plates, a pair of end plates, a bottom plate and an upper cover, and the end plates and the side plates are fixedly installed by means of welding, screw fixing and the like.

In this paper, by optimizing the low-pressure casting process parameters of the battery end plate, the smallest volume value of shrinkage porosity and the secondary dendrite spacing, as well as the shortest solidification time, are obtained. Therefore, the "smaller is better" characteristic is adopted, and the calculation formula is as follows:

When the structure of the battery module end plate is designed, the material of the body can be selected to be a material with lower density, so that the thickness of the body can be...

[0011] A first aspect of the present application provides an end plate of a battery module, including a main body and an energy absorbing body, the energy absorbing body includes an acting portion and a connecting portion, the acting portion protrudes in a direction from the main body toward a battery, and the acting portion is connected with ...

Aluminum as sheet and extruded profiles is the preferred material for BEV body structure, closures and battery enclosures. 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.

This application relates to an end plate of a battery module as well as a battery module. The end plate includes a body and a connector connected to the body. The body is ...

The first battery module level includes: a first heat exchanger including a cooling tube that defines a cooling area; a first secondary battery cell in thermal contact with the first heat exchanger at the cooling area; a coolant

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When the structure of the battery module end plate is designed, the material of the body can be selected to be a material with lower density, so that the thickness of the body ...

The end-plates are attached to both ends of the battery module and protect the internal components of the module, including the cells, by preventing the battery cells from being exposed to the outside

Aluminum battery enclosures or other platform parts typically provide a weight savings of 40% compared to an equivalent steel design. The most-used and best-suited alloys for battery enclosures are of the 6000-series Al-Si-Mg-Cu family, Afseth shared, noting that these alloys are "very well compatible" with end-of-life recycling. The ...

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