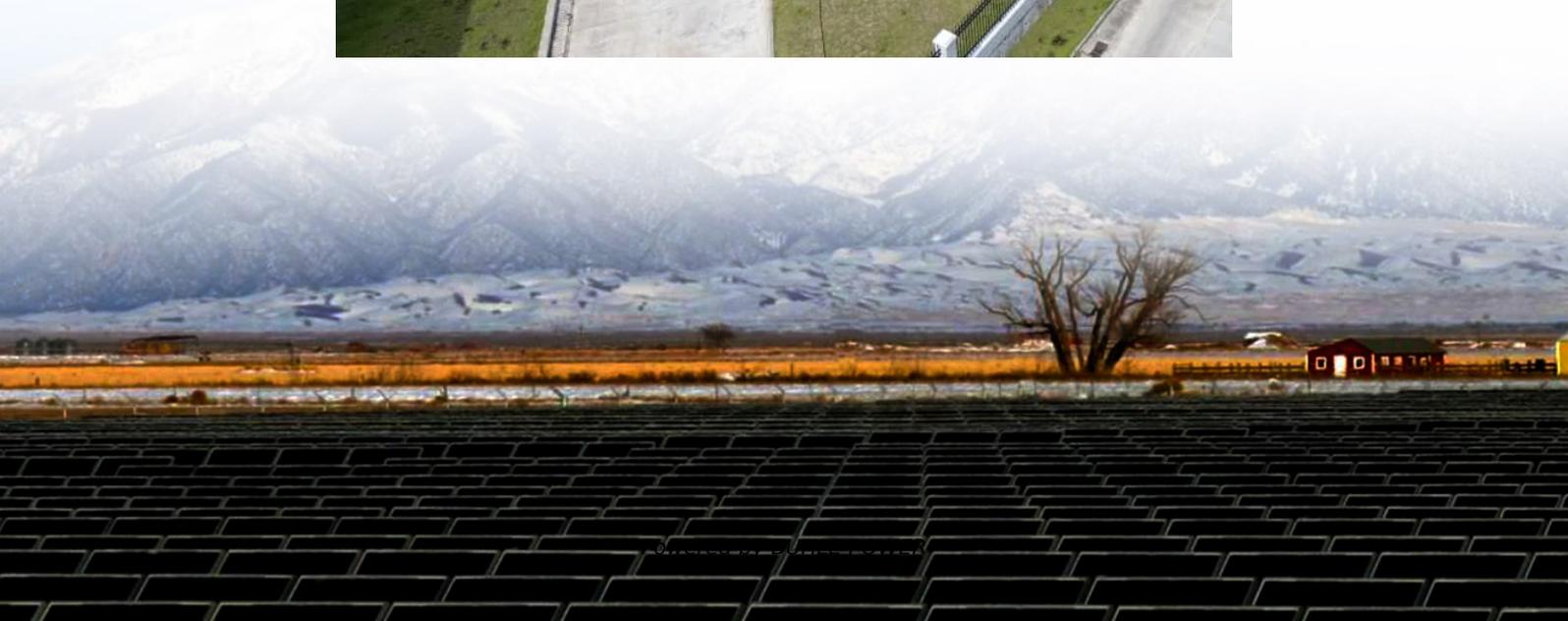


Battery pack design and structural design





Overview

What is a power battery pack design scheme?

Through weight reduction and structural optimization, an innovative power battery pack design scheme is proposed, aiming to achieve a more efficient and lighter electric vehicle power system.

How can battery packaging design improve battery safety?

A robust and strategic battery packaging design should also address these issues, including thermal runaway, vibration isolation, and crash safety at the cell and pack level. Therefore, battery safety needs to be evaluated using a multi-disciplinary approach.

How a battery pack is designed?

With reference to the existing models on the market, the battery pack structure of the model is designed according to the main parameters of the model, and a simplified electric vehicle battery pack model is established by Creo and the material information is determined.

How does a battery pack structure contribute to a car's performance?

Another important contribution comes from the sandwich structure, which is constituted by the passenger compartment floor and the underbody shield; sometimes, but not in all the existing solutions, the battery pack structure gives a contribution (see Figure 2) through specific structural components that are part of the battery case.



Battery pack design and structural design



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