

Corrosion-resistant energy storage containers for the Maseru chemical plant





Overview

Using phase change material (PCM) as the energy storage medium and applying it in a latent heat energy storage system has become an important way of new energy application. PCM has been widely used i.

Why is corrosion a problem in energy storage systems?

This problem will shorten the service life of the energy storage system and even lead to a serious leakage. This paper analyzes the corrosion mechanism of common metals, summarizes the corrosion research status of phase change materials, and summarizes several common corrosion protection methods.

Why is corrosion resistance important for macro packaging?

For macro packaging, ensuring the corrosion resistance of packaging materials in the TES system has become its main problem, because it is not only related to the safety of food in the transportation process but also related to the long-term use and complete function of the entire energy storage system , .

Can corrosion inhibitors be used in energy storage?

Adding corrosion inhibitors has become one of the main anti-corrosion methods. The technology is used in many production processes, including the production of petroleum products. At present, in the field of energy storage, research on corrosion inhibitors is also in progress.

What is corrosion inhibitor technology?

The corrosion inhibitor molecules are adsorbed on the surface of the container to form a protective layer, which greatly reduces the corrosion rate of the container in an acidic environment. At present, corrosion inhibitor technology is also developing in the field of energy storage.



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