

Comparison of Corrosion Resistance of Energy Storage Containers with Traditional Generators





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 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 organic phase change materials corrode packaging containers?

When organic phase change materials are used as energy storage media, corrosion of packaging containers will also occur. Kahwaji et al. performed corrosion tests on six organic phase change materials, and their selected material formulations are shown in Table 9.

Are phase change materials corrosive?

This paper reviews the corrosion problems of phase change materials (organic and inorganic) used as energy storage media in latent heat storage systems and compares the corrosive behavior of common PCM to several common metal materials (aluminum, copper, carbon steel, stainless steel).

Can PCM be used as a phase change energy storage medium?

When PCM is used as a phase change energy storage medium, there will inevitably be corrosion problems caused by salts. These corrosion data are very important for the practical application of PCM. In past studies, researchers have pointed out the importance of the long-term stability of containers used for PCM packaging .



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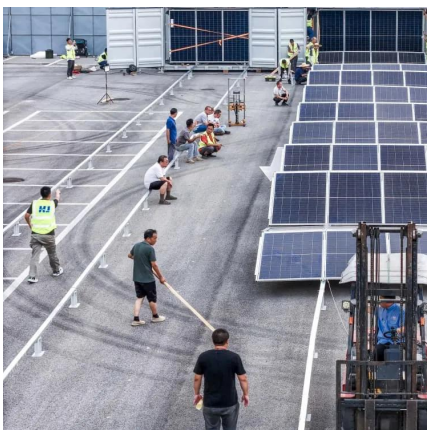
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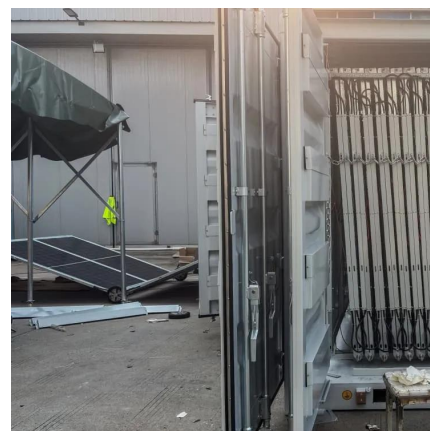


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