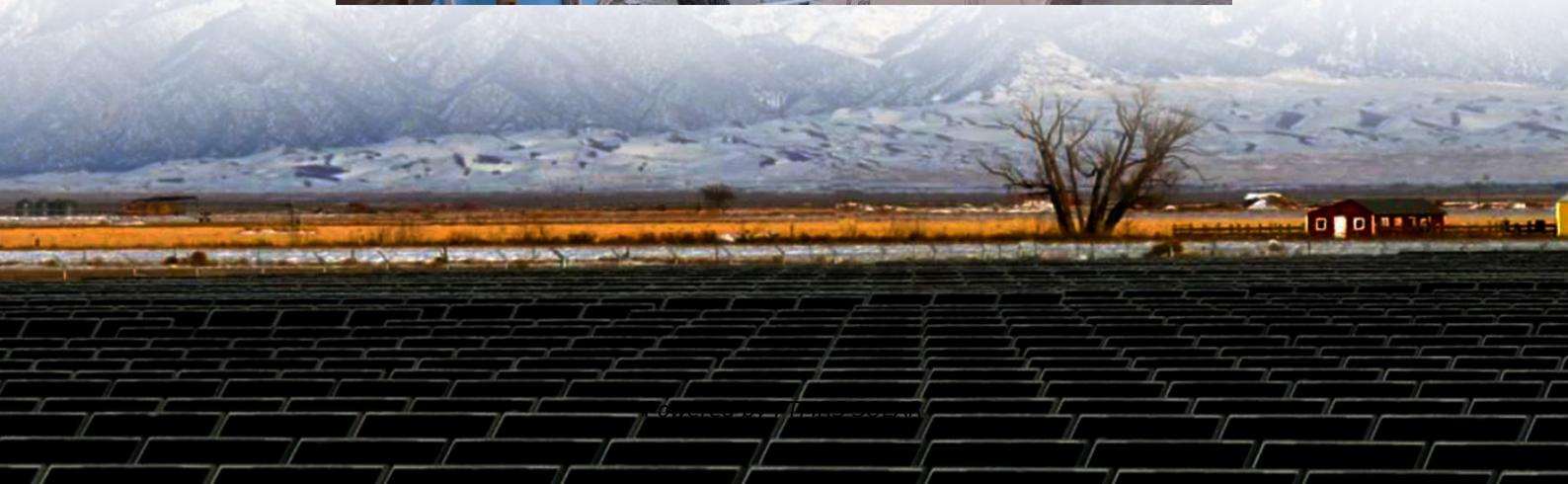
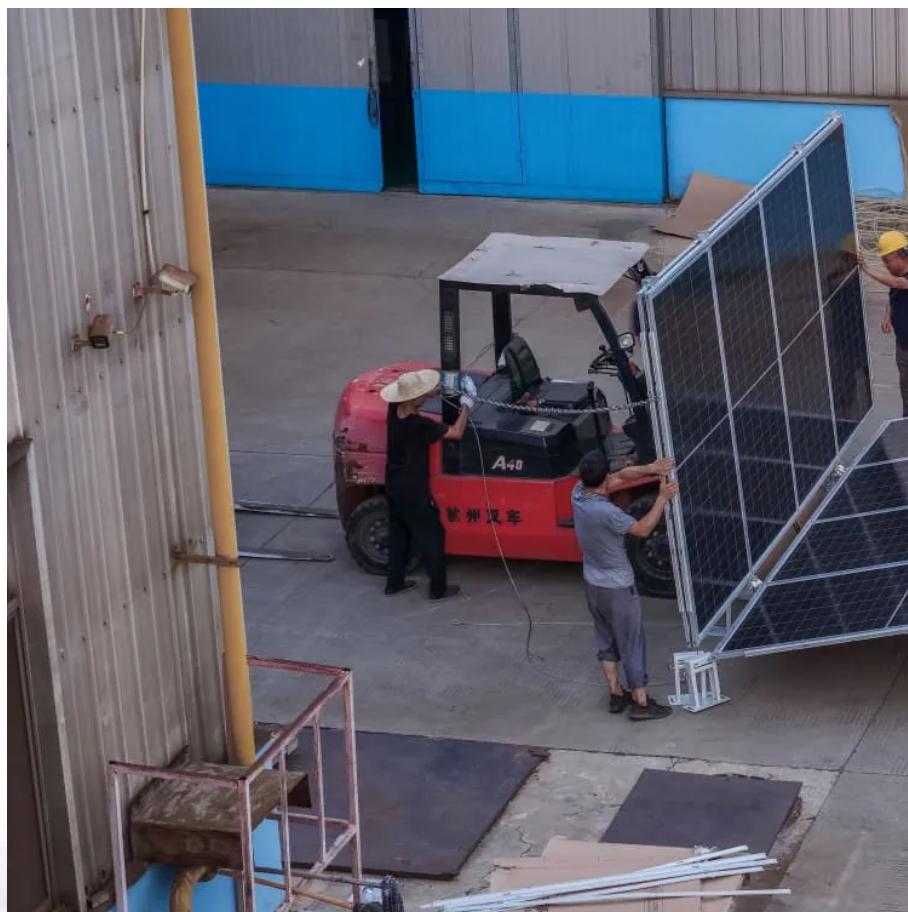




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High-Temperature Resistant Energy Storage Containers for Steel Plants Laos Type





Overview

What is thermal energy storage?

Thermal energy storage can be used in concentrated solar power plants, waste heat recovery and conventional power plants to improve the thermal efficiency. Latent thermal energy storage systems using phase change materials are highly thought for such applications due to their high energy density as compared to their sensible heat counterparts.

What are liquid metal thermal energy storage systems?

Liquid metal thermal energy storage systems are capable of storing heat with a wide temperature range and have, thus, been investigated for liquid metal-based CSP systems 3, 4 and in the recent past also been proposed for industrial processes with high temperature process heat. 5.

Should a latent thermal energy storage system be integrated?

Latent thermal energy storage systems using phase change materials are highly thought for such applications due to their high energy density as compared to their sensible heat counterparts. This review, therefore, gives a summary of major factors that need to be assessed before an integration of the latent thermal energy system is undertaken.

Are high temperature PCMs suitable for thermal storage?

In this review, however, the focus is to summarise latent heat thermal storage studies that use high temperature PCMs above 500 °C, if any, which are ideal for thermal storage integration into CSP plants and heat recovery.



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7 Medium

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