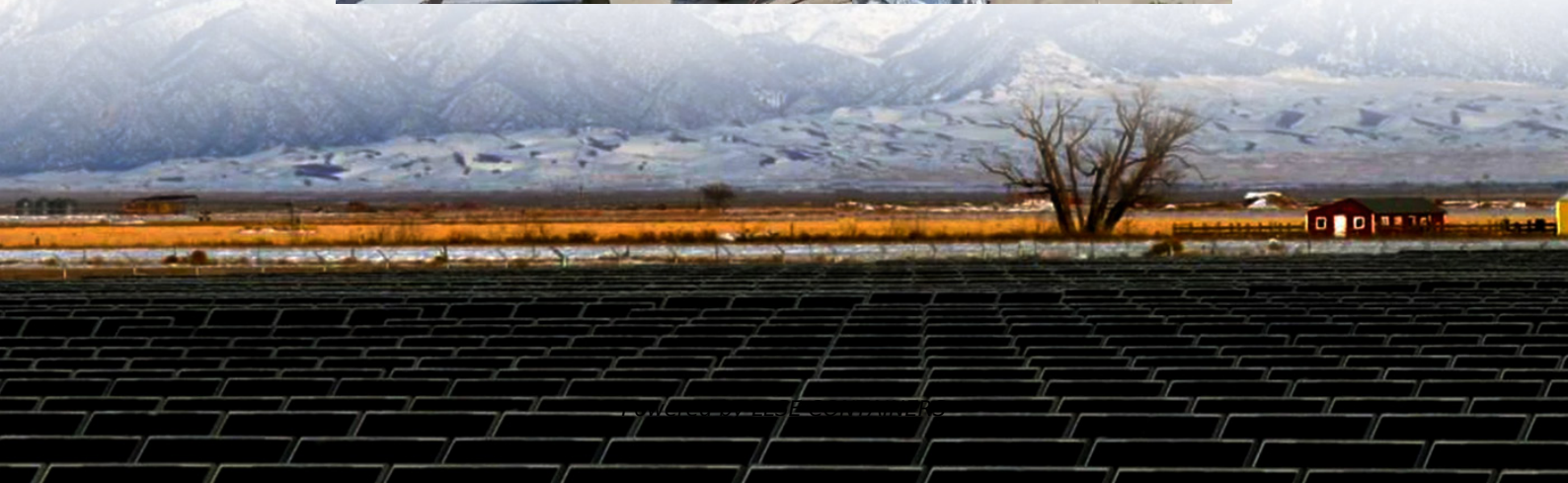


Comparison of Corrosion-Resistant Solar Containers and Diesel Power Generation





Overview

The current commercial deployment of concentrating solar power (CSP) relies on a system of thermal energy storage (TES) for round the clock generation of electricity. The heat harvested by a system of col.

How does molten salt affect solar power generation?

However, it is important to acknowledge that the corrosion induced by high-temperature molten salt presents substantial challenges to the structural integrity of components within the thermal storage system, encompassing pipes, vessels, and valves. Ultimately, this can result in disruptions to solar thermal power generation.

What is concentrating solar power (CSP)?

The current commercial deployment of concentrating solar power (CSP) relies on a system of thermal energy storage (TES) for round the clock generation of electricity.

Does Mo improve corrosion resistance in solar salt?

Considering the effect of Mo, which is known to improve resistance to localized corrosion in aqueous media, its benefit on corrosion rate in Solar Salt could not be established, considering that corrosion resistance of AISI 316/316L, 317L and OC-4 does not differ significantly from that of Mo-free alloys.

What is the corrosion rate of solar salt at 600 °C?

The corrosion rates in Solar Salt at 600 °C are practically the same as those of AISI 316, 321 and 347 tested at the same conditions and showing analogous increase of corrosion rate at 680 °C , associated with build-up of additional corrosion products at the higher temperature.



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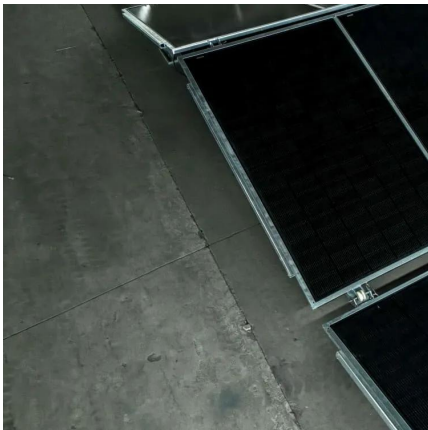
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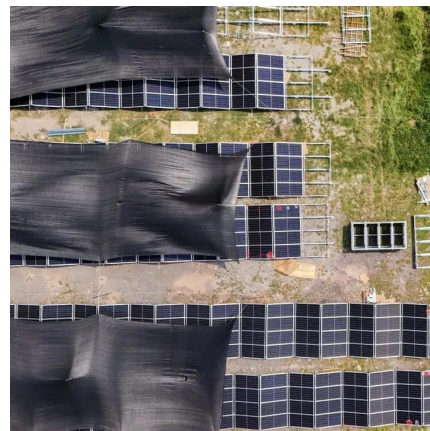
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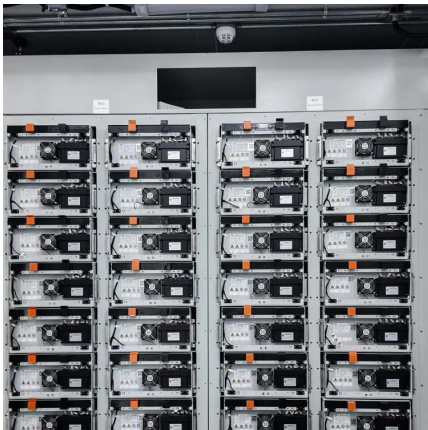
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