

Cement plant using Chad solar-powered container hybrid type





Overview

This work describes the implementation of concentrated solar energy for the calcination process in cement production. Approach used for providing solar energy includes the utilisation of a solar tower sy.

Will Cemex & synhelion develop fully solar-driven cement production?

Cemex and Synhelion have made significant progress in their joint effort to develop fully solar-driven cement production. They have scaled their technology to industrially-viable levels, enabling the continuous production of clinker, the most energy-intensive part of cement manufacturing, using only solar heat.

Why is Cemex collaborating with Synhelion?

Cemex and Synhelion have partnered to study the conditions to maximize heat transfer to the raw cement mix, a project called Solar MEAD. This collaboration has received recognition from the U.S. Department of Energy, which awarded US\$ 3.2 million for the project. Why they are partnering: To improve the efficiency of cement production through solar energy.

Can solar clinker be used for cement production?

For the first time ever, CEMEX and Synhelion successfully connected the clinker production process with the Synhelion solar receiver, producing solar clinker. This revolutionary innovation is an initial step to develop fully solar-driven cement plants.

Will Cemex & synhelion build a pilot cement plant?

Cemex and Synhelion will now take further steps toward constructing a pilot cement plant powered by solar energy. Fernando A. González, CEO of Cemex, stated, "I am convinced we are getting closer to the technologies that will enable net-zero CO₂ cement and concrete production.



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Aug 20, 2024 · Concentrating Solar Power for Cement Decarbonization Solar-Thermal Mixed-Media Enhancement and Decarbonization of Clinker Formation (Solar MEAD)



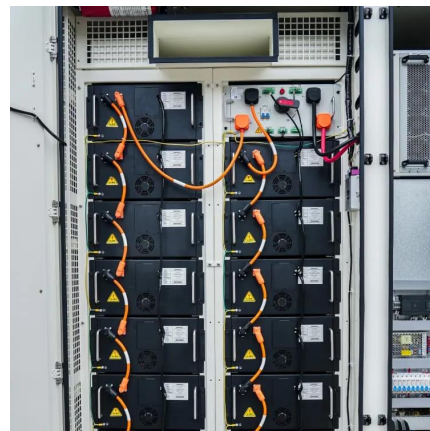
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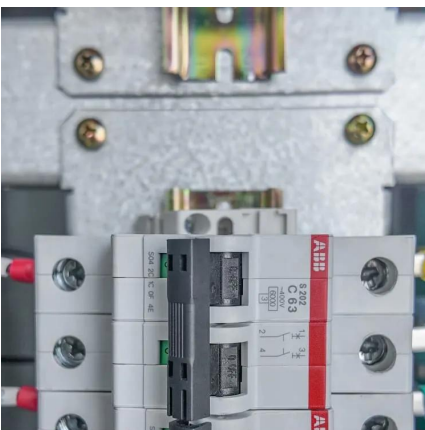
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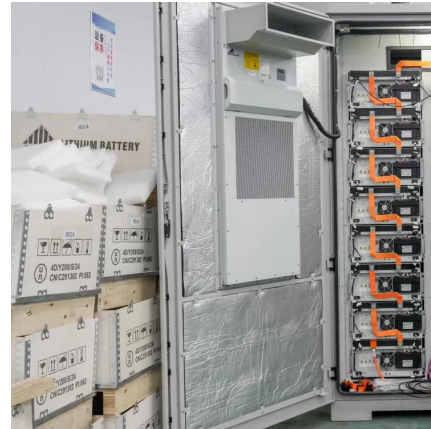
[Solar Hybridization Paths for Cement Production Processes](#)

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Cemex and Synhelion make further progress toward the ...

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Cemex and Synhelion make further progress ...

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