

Solar-powered containerized type for cement plants





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.

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.

What is a solar clinker?

This revolutionary innovation is an initial step to develop fully solar-driven cement plants. CEMEX, S.A.B. de C.V. (“CEMEX”) and Synhelion announced today the successful production of the world’s first solar clinker, the key component of cement, a significant step towards developing fully solar-driven cement plants.

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.

How clinker can be produced from concentrated solar radiation?

The Synhelion and CEMEX R&D teams set up a pilot batch production unit to produce clinker from concentrated solar radiation by connecting the clinker production process with the Synhelion solar receiver. The pilot was installed at the Very High Concentration Solar Tower of IMDEA Energy, located in Spain.



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Synhelion and CEMEX make further progress toward the ...

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Greening the Concrete Jungle: Solarizing Cement Factories

An innovative and efficient solar power plant solution has been developed for cement factories. On an annual basis, solar PV systems in cement plants may save 22,941 tonnes of CO₂.

Concentrating Solar Power for Cement Decarbonization

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

CEMEX and Synhelion achieve breakthrough in cement ...

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