

30kWh Solar Container 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.

Can a solar power system save CO₂ in cement industry?

Concentrated solar power system is designed for cement industry. Substitution of required thermal energy ranging from 100% to 50% is studied. 7600 heliostats with 570 ha land required for 50% conventional energy replacement with solar energy. Selected conventional cement plant could save 419 thousand tons of CO₂ annually.

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.

How can solar energy help cement production?

Growth in cement production consumes a considerable amount of coal for fulfilling the thermal energy requirement which ultimately produces a lot of greenhouse gases to the atmosphere. So, there must be some renewable sources of energy like solar energy which can fulfill the thermal energy needs for cement production.



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Solar power

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CEMEX and Synhelion achieve breakthrough in cement ...

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Synhelion and CEMEX make further progress toward the ...

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