

Cement Plant Solar Container Three-Phase Order





Overview

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.

Can a solar kiln be integrated into a cement plant?

Anyway, solar integration in auxiliary processes to the kiln system like preheating of combustion air and fuel, can be conceivable. Regarding all these, a stepwise solar hybridization into existing cement plants is required, as well as a storage system to achieve higher solar fractions and to operate the cement process continuously.

How much energy does a cement plant need?

Another challenge lies in the higher energy demand for induction-based systems. As discussed, process modeling suggests that an electrified cement plant using an induction-based pre-calciner may require a total energy input of 4.75 GJ per ton of clinker, which is higher than the 3.7 GJ/ton required by conventional fossil-fuel-fired plants 174.



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CEMEX and Synhelion achieve breakthrough in cement ...

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CEMEX and Synhelion achieve breakthrough ...

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Feb 5, 2020 · Keywords: CO2 emissions reduction Solar cement plant Solar calciner This paper discusses the techno-economic potential of solar thermal calciner technology in the cement ...

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