
AN OVERVIEW ON THERMAL ENERGY STORAGE FOR SOLAR THERMAL POWER PLANT

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ABSTRACT

In the current situation of high energy consumption, exclusive reliance on fossil fuels would almost definitely result in a future catastrophe, particularly for emerging countries. Although renewable energy sources such as solar energy are now widely used, the issue lies in the law and economics, namely social and acceptable. The main causes of these problems are the low density of solar radiation on the earth's surface, and if it is accessible, its fluctuation in nature with time of day and year. Solar energy storage units must be used in solar thermal power applications to overcome these challenges. The literature on thermal energy storage units using phase change materials has been thoroughly examined in this article in order to choose the appropriate PCMs and materials for the construction of a thermal energy storage unit test bench.

KEYWORDS: *Helical Coil, Pcms, Solar Cavity Receiver, Storage Unit.*

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