



# A Progressive Review on Solid Desiccant Cooling Systems

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**Abstract:** *The different types, applications of thermally activated solid desiccant cooling systems are reviewed in this paper. Particularly when compared to traditional vapour compression systems, solid-desiccant dehumidification has been shown to be a successful approach to remove the moisture from air with comparatively little energy usage. Despite being visually appealing, solar assisted solid desiccant cooling systems have remarkable performance that seem challenging to conventional cooling, according to a thorough evaluation that has been provided by earlier investigations. The solid desiccant dehumidification techniques are covered in detail in this review, along with configurations of related systems. In addition, attention has been given to the theoretical and technological advancements of the regenerator, a crucial part of the solid-desiccant dehumidification system.*

**Keywords:** COP, desiccant cooling, regeneration, solid desiccants

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