

Enhancing the productivity of a novel solar still by shading the secondary condensing cover

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Abstract

Desalination using solar energy is an alternate solution to the problem of brackish water. Basin type solar stills are used to produce potable water. Around the globe, many researchers have been working on the productivity issues of the still. Distillate output through solar still can be increased either by increasing the water temperature or by lowering the temperature of its condensing cover. Lowering its temperature causes higher condensation rate and higher external heat transfer. A novel design of solar still is proposed [1]. A single slope single basin solar still is modified by incorporating an additional condensing surface. This additional condensing surface when shaded with a wooden cover, the condensation rate was accelerated. Internal heat transfer coefficients were also improved.

Key words

Solar desalination, Novel design, Yield, Shading

Reference

[1] Sandeep, Sudhir Kumar, V.K. Dwivedi, Experimental study on modified single slope single basin active solar still, *Desalination* 367 (2015) 69-75.

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