VARIATION STUDY OF BASIN'S CORNER OF SOLAR-POWERED SEAWATER DESTILLATOR BY USING DOUBLE SLOPE TYPE

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ABSTRACT

The study used three solar-powered seawater destillators that has basin's corner variation, they are flat angle, oblique angle, and curved angle. Solar powered seawater destillator is made from the base area, they are (100 cm x 50 cm), (100 cm x 30 cm) and (100 cm x 30 cm) and the height are the same, it is 10 cm. Solar powered seawater destillator is used to heat seawater by 35 liters and based on the experiment that is done for three days start from 8 am until 3 pm, Solar powered seawater destillator with basin's corner that has curved angle showed better performance. It has an efficiency amount 52,14 percent. It is better rather than the efficiency of Solar powered seawater destillator with basin's corner that has oblique angle which is amount 50,27 percent. And the efficiency of Solar powered seawater destillator with basin's corner that has flat angle which is amount 25,45 percent. For the productivity of clean water that produced in a curved destillator, the average of freshwater productivity is up to 99 ml. In an oblique destillator, the average of freshwater is up to 95 ml, and in a flat destillator, the average of freshwater is up to 81 ml.

Keywords: *Solar-Powered Seawater Destillator, Double Slope, Angle of Basin's, Efficiency*