

The Effect of Condensing Temperature on Ice Producing Adsorption Cycle*

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Abstract

In this research effect of condensing temperature on the ice productivity of an adsorption cycle , has been studied. Were catcalated calculated Design parameters and the specifications of ice producing adsorption cycle using 1) Activated Carbon - Methanol as working pair and 2) constant flux of heat source. Ithes been found found that increasing the condensing temperature form 25 °C to 45 °C leds to a decrease in the productivity of the adsorption cycle while increasing the number of the competed ice producing cycles during a certain time interval (5 hour) from 8 to 12. This also led to an increase in the amount of ice to 7.0 kg by moving from 8 to 9 cycles, 5.0 kg by moving from 9 to 10 cycles, 3.6 kg by moving from 10 to 11 cycles and last 2.4 kg by moving from 11 to 12 cycles.

* For the paper in Arabic see pages (191-204).

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