

عنوان مقاله:

Investigation of thermal efficiency of a two-phase closed thermosyphon with unusually geometry

محل انتشار:

اولین همایش سالانه شیمی و مهندسی شیمی ایران (سال: 1396)

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خلاصه مقاله:

An experimental study was conducted in order to investigate the effect of filling ratio (F.R) and inclination angle inclination (ϕ) of the evaporator section on the thermal efficiency in the two-phase closed thermosyphon (TPCT) with vertical condenser and adiabatic sections. A copper tube with outer diameter of 16mm was used with distilled water at the filling ratio 15%, 30%, 45% and 60%. The evaporator section of TPCT (from the junction of adiabatic), 60 and 30° relative to the horizontal axis. The results showed that the highest thermal thermal for all situations, the filling ratio was 45% and the inclination angle of the evaporator section 60 relative to the horizontal axis. Also, evaporator heat transfer coefficients obtained from the experimental results of this research were compared with Rohsenow's correlation, who showed good agreement.

کلمات کلیدی:

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