

## عنوان مقاله:

Experimental Study of a Beta Stirling Thermal Machine Type Functioning in Receiver and Engine Modes

## محل انتشار:

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## خلاصه مقاله:

In this paper we studied a beta type Stirling machine. At first, we present the adopted theoretical quasi-stationary model. Then, we pass to the physical and geometrical presentation of this machine. The Latter was experimented according to two configurations: motor configuration and receiver configuration. For the first configuration, in order to improve the performances of the machine, we proceeded to the insulation of the machine hot room to reduce losses by radiation. For the second configuration, the machine is experimented as a heat pump and refrigerator. Comparisons between the theoretical and experimental results are also presented. We finally validated the results obtained by the model with experiments.

## کلمات کلیدی:

Stirling, Motor, Heat pump, Refrigerator, Regenerator, Porous media, Insulation, Heat transfer

## لینک ثابت مقاله در پایگاه سیویلیکا:

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