

CONTRIBUTION TO THE STUDY AND SIMULATION OF A PARABOLIC TROUGH PLAN

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ABSTRACT. This study focuses on the mathematical modelling of solar concentrator type “parabolic trough plan” a thermal balance was established respectively on the coolant on the absorber tube and the glass envelope, the system of equations obtained is solved by the method of finite differences, results are obtained for a typical day, the variation of the temperature of the coolant, the absorber tube and the glass envelope and the evolution of the power of the heat loss and efficiency of the concentrator.

KEYWORDS: *solar concentrators, solar, parabolic through plant, concentration*