

STUDY OF THE NATURAL CONVECTION IN A CAVITY EQUIPPED WITH A HEATING PLATE INSIDE

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ABSTRACT

The transfer of heat into a square cavity due to a thin heated plate, was studied numerically for hot plate placed vertically / horizontally. The movement of the flow in the cavity depends on the heating plate itself. The effect of position and aspect ratio of hot plate on heat transfer and circulation was addressed.

KEYWORDS: Fortran, Heat Transfer, Hotplate, Natural convection