

# THE UTILIZATION OF ELECTROMAGNETIC INDUCTION FOR HEATING THE THERMAL AGENT IN CLOSED CIRCUIT HEATING INSTALLATION

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**Abstract:** *Abstract: In this paper, we present the possibility of using electric energy for heating the thermal agent through electromagnetic induction in a metallic tube, placed into a closed circuit house heating installation. In order to obtain an electromagnetic field, we use an electronic generator with power tubes having the frequency of the alternative current grater than 10000 Hz, which we used at the beginning for hard soldering of non-ferrous metal parts, realized by the University of Oradea, by Teodor Maghiar and Stefan Roman, for the vacuum tube technique of magnetron type. This high frequency generator, imbedded in the hydraulic circuit of the heating installation with sanitary water is non-polluting The novelty of the heating installation consists in the OLT35 tubes with a porous metallurgical coke core, which has the role of both pre-heater and thermal resistance.*

**Key words:** *electric energy, electromagnetic induction, high frequency generator, porous core, fluid thermal agent*



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