

## EXPERIMENTAL STUDY OF THERMAL PILE CHARACTERISTICS

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The article is devoted to an experimental study of the efficiency of a heat pump. The relevance of this work is due to the widespread use of thermal piles for soil stabilization in permafrost zones in order to prevent deformation and ruptures of gas and oil pipelines. The purpose of this work is to assess the impact of climatic conditions and the degree of damage to the soil heat stabilizer on its performance. An experimental study showed that with an increase in the blowing speed and a decrease in the air temperature, the heat capacity of the heat pump increases. It was also found that damage to up to 30 % of the working surface of the heat pump leads to a slight (up to 12 %) decrease in its thermal capacity.

**Keywords:** thermal stabilizer, climate chamber, heat capacity of the heat pump, efficiency of the heat pump.

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