

# **DEVELOPMENT OF NEW METHODS FOR COMBINING HEAT TRANSFER**

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**INTRODUCTION.** Development of new methods of combination of heat exchange, for economy of energy resources and overall performance of thermal point.

**DESCRIPTION.** A relevant problem of energy saving is decrease of consumption of energy resources and unproductive losses of warmth in a surrounding medium by settlement of peaks of thermal load. Development of new methods of combination of heat exchange is important in a power engineering. The first stage of the decision is consideration and the analysis of the available systems of the combined heat exchange. Analyzing problems of increase in effectiveness and profitability of systems of central heating, it should be noted imperfection of a system of distribution of the warmth based on giving to the consumer in advance defined its quantities. In the modern conditions of market economy it is necessary to provide a possibility of the combined heat exchange at which each consumer will be able self-contained to select from the system of central heating a quantity of heat necessary to it for creation in rooms of desirable heating comfortable environments. Use of an auxiliary heat exchanger in a heating system allows to separate liquid from one contour from liquid another. Theoretical researches of thermal and hydraulic controls of the water systems of central water heating equipped with additional sources of warmth and heat-accumulators show that heating systems in these conditions work more steadily.

The main function heat of the accumulator is an increase in volume of the heat carrier, accumulation of warmth for the purpose of decrease of peak loads by a system inventory, additional use of the alternate sources of warmth, rational consumption of fuel, a fine motion of parameters of the heat carrier and correction of time-temperature charts of a system of heat supply.

## **CONCLUSIONS.**

1) Transfer of warmth between several heat carriers becomes an ordinary thing, especially in the energy saving systems of the distributed oscillation, for example in the houses equipped with helioheating systems and hot water supply.

2) Development of the new principles of heat supply, with inclusion in structure of a heating system of heat accumulators is an important scientific and technical task the solution of which allows to save large volumes of warmth, fuel resources and the electric power.