THE DESIGN OF FINNED STATIC SPACE HEATERS

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Abstract: The radiators taken into consideration for further calculations and experiments are made of copper pipes with aluminum fins (quadratic fins). Starting from the expression of the overall heat transfer coefficient for a plane wall, there were calculated the heat fluxes transferred by conduction, convection and radiation from the working fluid to the environment, by mediation of the extended heat transfer surfaces. There were used the general equations of the fin adapted to the concrete case of the given dimensions.

Key words: heat transfer, finned space heater, natural convection.

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