

Improving Energy Efficiency of Copper Tube Heat Exchanger by Adding Nanodisperse Materials to the Coating

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Abstract: The authors studies the processes of copper electroplating with the addition of nanomaterials. A series of experiments to determine the heat transfer coefficient and the dependence of the heat transfer coefficient on the coolant flow rate were conducted. An increase in the heat transfer coefficient up to 20 % when using nanodispersed materials in these processes was verified.

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