## ANNOTATION

The thesis is devoted to the issue of increasing the thermal efficiency of a power plant and reducing heat loss to a cold source. From a thermodynamic point of view, the replacement of surface heaters with mixing heaters is justified, since the heating of feed water to the saturation temperature of heating steam is excluded. This increases the consumption of the heating steam extraction and reduces the passage of steam through the condenser.

At the same time, mixing heaters play the role of additional feed water deaerators, reducing the content of corrosive gases in the water. The paper shows the differences in the designs of both types of heaters.