

## **New Scheme of Control and Air Supply in a Low-Power Hot Water Boiler**

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**Abstract :** The article presents the state of solid fuel reserves and their share in the world energy sector. The air pollution caused by the operation of heating devices using solid fuels is a significant problem. In order to improve the air quality, heating device producers take constant measures to improve their products. However, the emission results achieved during an initial test of heating devices in the laboratory may be much worse during operation in real operating conditions. The ways of increasing the efficiency of the boiler by improving its design for combustion in full-layer mode are shown. The results of the testing of the improved KBTC-0.2 hot water boiler is presented and the technical and economic indicators are determined, which indicate an increase in the efficiency of the boiler.

**Keywords :** boiler unit, grate, furnace, coal, ash

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