

The invention relates to the power engineering and may be used in the heat-and-power industry, including the glass, steel-melting furnaces, for ceramics production, as well as to the heat-and-power boiler plants, heat-treating furnaces, etc.

The power gas reactor contains a main system for feeding of furnace blast air and high-pressure fuel gas with the branch pipes for outlet thereof, a cylindrical combustion chamber, a nozzle (30), two annular air chambers with a system of holes, a gas injector (14) equipped with a great number of holes (15), and an ignition system, at the same time the system for blast air feeding is equipped with the second individual inlet, joined by means of electric insulating gaskets (19, 20) with a cylindrical mantle (21), placed coaxially with the fuel gas feeding pipe (18) and made with the possibility of tangential inlet of the furnace blast air inside the ionization chamber.

The result of the invention consists in increasing the efficiency of the gaseous hydrocarbon fuel burning process.

Claims: 3

Fig.: 1

