

**99-0130**

The invention refers to the power engineering and may be used in the thermal power equipment.

Process for fuel gas burning comprises the fuel gas and fuel blasting air preheating, mixing and ignition thereof and before preheating the fuel blasting air is saturated with oxygen by separation of nitrogen therefrom, before mixing the air saturated with oxygen and fuel gas is ionized with opposite polarity, mixing and ignition is realized by agglomeration of the saturated air and fuel gas ionized particles in the constant electrical field.

The installation for fuel gas burning contains a burner with mixing chamber coupled with the furnace embrasure and chambers for fuel blasting air and fuel gas feeding, coupled accordingly to the outlets of preregenerative heaters of fuel blasting air and fuel gas, situated into the burned gas channel of the furnace, and the preheaters inlets are coupled with the high pressure compressors. Into each feed chamber of the burner it is disposed a system of corona electrodes and into the mixing chamber - a system of electrodes for storing the gas ionizing particles, the latter being connected to the high voltage source. The inlets of the two separators containing porous granules strata for nitrogen adsorption, are coupled in parallel, with the compressor.