

The invention relates to the power engineering, in particular to the power-generating plant.

The process for fuel gas burning includes the preliminary heating of the blast combustion air, enrichment thereof with oxygen by separating the nitrogen therefrom, feeding of the blast air into the combustion zone, mixing thereof with fuel gas and ignition. Novelty consists in that the blast air is divided into the base and the auxiliary parts, in the ratio of 1:(0,5-0,8). The auxiliary part of the blast air is turbulized, it is acted on with a nonuniform magnetic field with the intensity of 2000...3000 Ersted and heated up to the temperature of 200...400°C, and mixing is carried out by injection of the auxiliary flow of blast air into its base part. Heating of the auxiliary part of the blast air is carried out by means of gases waste at burning.

The installation for fuel gas burning contains a mixing chamber, joined with the furnace embrasure, including a burner and a gas removing pipe, a fuel gas feeding chamber, placed into the mixing chamber, a blast combustion air feeding chamber, joined with the mixing chamber and containing a blast air heating device. Novelty consists in that the blast air feeding chamber is made in the form of a hollow semicircle with circular section of diamagnetic material, in the centre of the convex part of which it is fixed the inlet pipe, dividing the chamber into two branch pipes: auxiliary and base, the auxiliary branch pipe is equipped with a turbolator and a gate, fixed onto its free end, and the base branch pipe is equipped with an ejector and joined with the mixing chamber. Additionally, in the upper part, the blast air feeding chamber contains a transversal pipe, joining the auxiliary branch pipe and the base one. Onto the sector of the transversal pipe, adjacent to the auxiliary branch pipe, there is mounted an electromagnet, including a coil embracing the pipe and a core placed inside the pipe, and onto the sector of the transversal pipe, adjacent to the base branch pipe, there is mounted the heat exchanger, made in the form of a serpentine, bending around the pipe and coupled with the mixing chamber.

Claims: 3

Fig.: 1