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THERMAL SCIENCE

International Scientific Journal

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PROSPECTS FOR USE OF MICRONIZED COAL IN POWER INDUSTRY

ABSTRACT

Heat-and-power engineering is the basis for industrial development of developed countries and the main energy fuel for plants is coal. The main directions in improvement of coal energy technologies are related with better ignition of powered fuel and with gas and mazut substitution with coal powder. This paper considered the prospects of energy coal enrichment and the method for production of ultrafine coal with the average size of particles about 10-20 microns, and the existing machines for ultrafine coal production. This method increases substantially the velocity of ignition and combustion of pulverized coal flame. The changes of physical and chemical properties of coal after grinding were considered, the processes of ignition, combustion of micronized coal, spaying and stabilization of flame combustion were analyzed in this paper. The problem of ultrafine coal ignition were considered also.

PAPER SUBMITTED: 2002-03-01

PAPER REVISED: 2002-10-15

PAPER ACCEPTED: 2002-10-01

CITATION EXPORT: [view in browser](#) or [download as text file](#)

THERMAL SCIENCE YEAR 2002, VOLUME 6, ISSUE 1, PAGES [29 - 43]

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