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There is a tendency for fly ash, as heterogeneous mixture of particles of different physical, chemical, mineralogical and morphological characteristics, resulting from coal combustion in power plants, not to be considered as a waste material, but also as a secondary raw material, that may find its application in different industries. Regarding the properties of this finest fraction that remains after coal combustion they have been researched in a paper, published in the journal "Mining and Metallurgy Engineering Bor" No. 2/2013, prepared by Ivana Jovanovic, Mile Bulgarian, Srdjan Magdalinovic from the Institute for Mining and Metallurgy Bor.

Characteristics of fly ash are primarily determined by the quality of combusted coal, primarily by phase composition of inorganic components in coal and its transformation during combustion process. In addition, the technology of the process itself affects the combustion process.

Fly ashes are, usually, by their chemical composition, distinctly aluminosilicate materials, while according to the mineralogical composition can be distinguished three types of components, grouped as: inorganic, organic and fluid part. The inorganic part is presented as amorphous and crystalline phase. The organic part consists of a series of mineral neo-formations from the original coal to semi-coke and coke, while fluid matter consists of humidity, gases and gaseous fluid inclusion related with fly ash particles.

The formation of ash covers three stages: melting of mineral components dispersed in coal, agglomerations of ash liquid droplets with the combustion of coal creation of fly ash. Applicable Serbian standard SRPS B.C1.018 classifies fly ash in artificial pozzolan and divides it into two categories: siliceous fly ash and carbonate fly ash.