

At the International Conference on the Surface Coal Mining, held on Zlatibor in 2014, a group of professors from the Faculty of Mining in Belgrade presented a paper entitled Dimensioning of Coal Stockpiles.

In fact, this is a kind of analysis into the coal stockpiles utilization methods, with special emphasis on the ones in Serbia. The paper also examines their size and level of use. Coal storage facilities are formed for three reasons. Primarily as a storage space, then to facilitate mixing of coals of different origin, or as a space for the so-called homogenization of coal of different quality. Different uses affect the size, type and equipment used at the stockpile. In Serbia, they are mostly used for storage, or coal homogenization. Stockpiles as areas used to mix coals of different origins and characteristics are present only at large ports.

Coal stockpiles as storage areas are formed because coal is sold to customers located far away from the mine, or in cases where it is necessary to balance the discontinuity between the mine and thermal power plant operation. In contrast to these stockpiles, homogenization stockpiles are technologically most complex as they need to provide (through mixing) coal of standard and consistent quality from the coal of varying quality. These stockpiles are typically at the end of the technological chain of coal quality management. For this reason, their possibilities are highly limited.

Blending coals of different origin and quality, includes depositing different coals next to each other depending their arrival time to the stockpile. Sometimes it is possible to alternate the arrival of different coal types and to ensure equal quantities, which in turn affects the uniformity of quality. Yet this happens in a small number of cases.

The authors concluded that identifying proper dimensions of each coal stockpile is a highly complex task which in addition to technical considerations related to the purpose of the stockpile and coal quality involves an analysis of the many social and economic parameters. The authors continue to assume that the coal stockpiles in Serbia are used irrationally and are primarily oversized. However, the space on the existing storage stockpiles enables their conversion into the homogenization stockpiles with the previous conversion of stockpile machines.