

Coal preparation for the industry

Non-coking coal constitutes about 85% of Indian coal reserves which are of high moisture, high ash, high volatile and sub-bituminous types (with Ro% ranging between 0.4 to 0.65). Washing of non-coking coal generated much interest in view of the Ministry of Environment and Forests' stipulation of movement and consumption of thermal coal beyond certain ash percentage i.e. drive towards washing non-coking coal is essentially re-active from the point of view of both producer and consumer of coal. Transporting of coal of ash not exceeding 34% beyond 500 km is posing problems to different coal suppliers for the dispatch of its coal to the power plants. The solution to this problem will call for setting up of washeries to reduce the ash content.

At the behest of erstwhile Planning Commission a working group committee set up to look into consider the two important scenarios namely, (1) 2×500 MW power plant at the pit head using ROM coal and (2) integrated 2×500 MW power plant along with a coal washery at pit head and CFBC or AFBC based power plants utilizing washery rejects. These two points are elaborately discussed and different physical processes are adopted in cleaning raw coal from mine with or without any chemical reagents, to get a product which could be sold in the market or can be used for various purposes as coke making or for power generation. The distinguished scientists and experts in the field of coal preparation from the CSIR-Central Mining & Fuel Research (CIMFR), Dhanbad have contributed a set of research papers in the subject area which are of immense value for the industry and have suggested some useful and innovative methods, new approaches among them, are online coal washability.

Hopefully, this special issue of the *Journal of Mines, Metals & Fuels* should prove to be of some interest and would provide insight into the "black art" of coal washing.

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