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Cleaning of Indian coals by agglomeration with xylene and hexane

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Abstract

A laboratory scale agglomeration process has been undertaken for cleaning Indian coals using oils namely, xylene and hexane. Maximum organic matter recovery for xylene has been found to be 91.9% whereas with hexane, the value is 54.7% on a dry basis. The highest ash rejection values with xylene (90.7%) and with hexane (89.7%) are almost same. Promising results for rejection of metals (Fe, Mg and Zn) have been observed. It has been found that xylene is more selective than hexane for the agglomeration process. Knowledge gained from this study will be helpful for technological advancement of this kind of work.

Author Keywords: Coal cleaning; Xylene; Hexane; Agglomeration

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