

Coal Preparation

Delkor India has recently commissioned India's largest horizontal belt filter for coal filtration at West Bokaro Coal washery III of Tata Steel. The Horizontal belt filter is also the world's largest HBF with effective filtration area of 145 m² for coal slurry. Washery II at West Bokaro was the first to implement Delkor Belt Filters's with effective filtration area of 64m².

The success of the project is the result of Tata Steel's vision for adopting advanced technologies and Delkor's exhaustive filtration tests and rich coal filtration experience from more than 60 installations by Delkor in Australia and other parts of the world.

The complete Delkor Belt Filter was erected at site. The filter was commissioned during August 2009. This filter has replaced existing dewatering centrifuges.

Tata Steel is to benefit on power saving and eliminate their loss of solids by changing from dewatering centrifuges to the Delkor Belt Filter.

The particle size range of clean coal is -0.5mm. The froth from flotation cells is thickened in one of Delkor's High Rate Thickeners to the consistency of 30% solids w/w and fed to the filter. The filter is designed to handle 45 tph of solids (dry basis) and moisture in the discharge cake is as low as 22% w/w.



145m² Delkor Belt Filter installation at Washery III West Bokaro Tata Steel



Cake Discharge