

Drum Scrubber Performance Assessment and Improvement to Achieve the Desired Product Quality

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Abstract : Drum scrubber is widely used equipment in the washing of Iron ore. The purpose of the scrubber is to release the adhered fine clayey particles from the iron-bearing particles. Presently, the iron ore wash plants in the Eastern region of India consist of the scrubber, double deck screen followed by screw classifier as the main unit operations. Hence, scrubber performance efficiency has a huge impact on the downstream product quality. This paper illustrates the effect of scrubber feed % solids on scrubber performance and alumina distribution on downstream equipment. Further, it was established that scrubber performance efficiency could be defined as the ratio of the adhered particles (-0.15mm) released from scrubber feed during scrubbing operation with respect to the maximum possible release of -0.15mm (%) particles.

Keywords : scrubber, adhered particles, feed % solids, efficiency

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