



PROBLEM SOLVED™ PAPER

SOLUTION: Martin® QB1 Cleaners HD, Martin® Apronseal™ Double Skirting

INDUSTRY: Coal-Fired Power

LOCATION: Adani Power Maharashtra Ltd., Gondia, India

PROBLEM

A coal-fired power plant in India was facing serious problems from dust, spillage and carryback on one of its 60 conveyors, which handles 5,000 tons per hour of bulk material. The condition became so severe that the fugitive material was posing a safety hazard, and between the maintenance and the lost material, the customer estimated that the problem was costing the facility about 25 MINR per year. Cleanup also required personnel to work in close proximity to the moving conveyor, creating another potential risk. Management wanted to reduce the safety hazard and cleanup time by minimizing material loss from the load.



Adani Power Maharashtra in Gondia, India was experiencing problems with dust, spillage and carryback.

SOLUTION

The Martin Engineering team visited the site and performed a Walk the Belt™ inspection of the conveyor. After a detailed survey and discussion with facility managers, the technicians suggested installing six Martin® QB1 Cleaners HD to reduce carryback. Manufactured specifically to maintain the most efficient cleaning angle throughout its service life, the Martin® QB1 Cleaners HD features a no-tool replacement process that can be performed safely by one person in less than five minutes. Martin® Apronseal™ Double Skirting was also installed along the entire transfer point, a dual sealing system that prevents spillage without requiring constant service to maintain an effective seal. The primary seal is clamped to the chute wall with the self-adjusting secondary laying outward to create an effective dust seal that is out of the material flow.



Martin Technicians installed belt cleaners and skirting to prevent spillage.

RESULTS

The solution has proven very effective, dramatically reducing dust, carryback and spillage. The Martin® QB1 Cleaners HD are effectively keeping the belt clean without the need for secondary cleaners, and the result is significantly reduced maintenance time for cleanup, minimizing the potential hazards and allowing personnel to concentrate on more important activities. The components have proven so efficient that the customer has proposed to place more belt cleaners and Martin® Apronseal™ Double Skirting to control fugitive material on other conveyors.



The solution has proven very effective, dramatically reducing dust, carryback and spillage.