



PROBLEM SOLVED™ PAPER

SOLUTION: Martin® Transfer Point Products

INDUSTRY: Pulp and Paper

LOCATION: West Coast Paper Mills Ltd / Dandeli, Karnataka, India



The West Coast Paper Mills facility in Dandeli handles approximately 320,000 tons of lime per year.

PROBLEM

West Coast Paper Mills was experiencing excessive dust and spillage issues from two 650 mm wide conveyors transporting lime, as well as potential health/safety issues from airborne particulates. The conveyed material is a very fine powder, with virtually no moisture content, and the problems were particularly severe in the loading and settling zones. Dust would cling to all of the horizontal surfaces, and significant amounts of spillage accumulated on floors, walkways and under the conveyors. Operations personnel wanted to reduce the potential hazards and material waste by improving the conveyor sealing and dust collection.

SOLUTION

Martin service technicians visited the site and recommended a combination of passive dust management and fugitive material controls to alleviate the problems. With the Martin Service Technician supervising, customer personnel assembled a Martin® Modular Chute Box, with Martin® External Wear Liner along the length of the loading and settling zones. They outfitted the rebuilt chute with Martin® BOCO Skirting to better contain the load and Martin® Apron Seal to help prevent fines from escaping. Dust curtains were added to control the air flow and improve settling, with a Martin® Dust Bag to use the positive air pressure from the chute as the driving force for filtration and reduce the local overpressure around the loading point.

RESULT

The improved containment was immediately apparent upon start-up, with a dramatic reduction in spilled material and airborne dust. All components have successfully withstood operating temperatures as high as 150°C. According to a customer spokesperson, "After 6 months of operation, we have found that the solutions provided have been performing satisfactorily and have significantly reduced the dust, spillage and the manpower involved in cleaning up the fugitive material. We are happy with the performance, service and overall functioning of the Martin Engineering India team." The customer plans to implement the same solution with belt cleaners for another of its conveyors.



Material loss, potential health & safety hazards and excessive cleanup time were all motivating factors.



The modular chute box, sealing components & dust bags successfully contain the dry, powdered load.