



PROBLEM SOLVED™ PAPER

SOLUTION: Foundations™ Workshop, Martin® Belt Cleaners & V-Plow

INDUSTRY: Cement

LOCATION: Ibague, Colombia

PROBLEM

A cement plant in Colombia was experiencing severe spillage issues on several of its conveyors, causing belt misalignment and damage to the belt and rolling components. On conveyor 312-04, which receives limestone from the primary crusher, carryback resulted in a crusty accumulation on the return rollers and underside of the belt. Conveyors 4125 and 4130, used for handling cement additives, experienced spillage along the entire return run, as well as encrusted material in the return rollers. The situation increased maintenance costs, due to premature replacement of the belt and conveyor components, as well as the labor expense of three people for a full shift each. These employees were also exposed to the inherent risk of having to work around moving conveyors.



At a cement plant in Colombia, limestone was accumulating on the return roller and the underside of the belt.



Martin held a Foundations™ Operations & Maintenance Workshop at the plant for a group of 15 employees.

SOLUTION

Operations personnel were unaware that investment in specialized bulk material handling components could reduce maintenance costs and extend wear life, improving both safety and productivity, so Martin Engineering specialists first recommended the Foundations™ Operations & Maintenance Workshop, in order to provide education about conveyor safety, effective belt cleaning & alignment, transfer point improvements, wear liners and belt sealing systems, as well as dust collection and suppression. The workshop also included an analysis of the ROI from installing the recommended equipment and a field visit. A group of 15 company employees attended, including staff from management, maintenance, production, engineering and interns.



At the end of the workshop attendees were able to identify the primary issues and prioritize the most pressing needs.

RESULTS

At the end of the workshop attendees were able to identify the primary issues and prioritize the most pressing needs. The Martin solution was recommended in several stages to suit the plant's budget. First the team installed primary and secondary belt cleaners to eliminate carryback, significantly reducing material spillages as well as material on rolling components. Martin® V-Plows were also installed conveyors 4125 and 4130 to protect the tail pulley. The customer is very satisfied, "The solution has improved the condition of the belt, eliminating material spillages caused by accumulation of material and allowing proper functionality of the equipment." The company has requested a quote for another workshop for different personnel from the cement plant, as well as additional equipment for the rest of the conveyors.