BENETECH

Optimizing Conveyor Performance with System Upgrade

PROBLEM SUMMARY

A cement manufacturing facility was facing significant spillage and airborne dust issues that affected multiple conveyor systems. The underlying problems stemmed from worn skirting systems, deteriorated wear liners, and an improperly located dust collector pick-up. These deficiencies led to continuous spillage along the conveyors and an ineffective dust collection system. As a result, the area surrounding the equipment became excessively dusty, complicating maintenance efforts and posing health risks to workers. Additionally, the spillage led to financial losses due to the wasted product, further impacting the plant's efficiency and bottom line.

BENETECH SOLUTION

Recognizing the severity of the issues, the plant management sought a comprehensive solution and turned to Benetech who in turn, developed a strategy to address the facility's challenges.

The project focused on upgrading the conveyors to eliminate spillage and reduce dust. Approximately 45 feet of Benetech's MaxZone[®] Skirting System was installed on one conveyor, effectively sealing the load areas up to the discharge pulley. Additionally, the dust collection pick-up was relocated to enhance its efficiency. The remaining conveyors had their load zones rebuilt using Benetech XN Liners[®], which successfully sealed the sides and eliminated spillage.

Benetech products included, but were not limited to:

MaxZone[®] Load Zone System — A belt enclosure system with easy-to-access, externally adjusted skirtboards; internal wear liners; dust curtains designed to disrupt air flow streams and prevent dust escaping the enclosure; and rubber skirting to prevent dust leakage along the sides of the conveyor.



IT PAYS TO IMPLEMENT BENETECH SOLUTIONS

- Eliminated spillage issues
- Reduced clean-up time and simplified maintenance
- Cost savings in material loss and housekeeping efforts
- Improved air quality and lowered health risks
- Reduced risk for MSHA citations

SUCCESSFUL RESULTS

Benetech's solutions produced exceptional results, transforming the previously problematic conveyor systems. The installation of the MaxZone[®] Skirting System and XN Liners[®] resulted in the complete elimination of spillage and a significant reduction in airborne dust. In turn, the time and effort required for housekeeping has significantly decreased, enhancing operational efficiency.

The facility's management was particularly impressed with the simplicity and modularity of the MaxZone[®] system, which not only ensured a comprehensive seal for the conveyors but also facilitated easier installation and maintenance. This cement manufacturing facility was so happy with these results that they are planning a similar project next year.









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