

PROBLEM SOLVED™ PAPER

SOLUTION: Martin® Hurricane Air Cannons

INDUSTRY: Coal-Fired Power

LOCATION: Coal-Fired Power Plant in Turkey



A coal-fired power plant in Turkey was having trouble with dust and spillage at a conveyor transfer loading point.



After assessing the design, Martin Engineering determined several areas for improvements.



The plant has been running at full capacity since.

PROBLEM

A coal-fired power plant in Turkey produces over 300,000 tons per day, making them the largest manufacturing plant in business with the highest production capacity in the world. Imported coal is used to meet the electricity needs of the plant and is used as fuel in the production plant. The plant was having trouble with dust and spillage at the conveyor transfer loading point in addition to excessive spillage and piles of fugitive materials under the conveyor belt. The problem led to manual cleaning and an increase in maintenance costs, resulting in regular and costly down-time and man-hours.

SOLUTION

After assessing the design, Martin Engineering determined several areas for improvements. Martin installed Martin® Slider Cradles to support the edges of the belt to eliminate sag and Martin® Impact Cradles to absorb the force of falling material to prevent damage to the belt and structure and to help eliminate spillage. While Martin® ApronSeal™ Skirting was added to prevent spillage without requiring service to maintain an effective seal.

Additionally, a Martin® QC1[™] Cleaner XHD was installed to provide a durable belt cleaning performance in this challenging applications with a Martin® SQCS[™] Cleaner in the secondary position which allows installation in close guarters and helps resist material buildup.

RESULTS

The transfer point upgrades have eliminated the dust and spillage problems and the plant has been running at full capacity since.