PROBLEM SOLVED™ PAPER

SOLUTION: Martin® ApronSeal™ Single Skirting HD

INDUSTRY: Cement Plant

LOCATION: Nuvoco Vistas Mejia Cement Plant in West Bengal, India

TITLE: Provided Significant Reduction in Dust & Spillage

Nuvoco's Cement Plant faced dust and spillage issues & non-standard sealing component damage.

ApronSeal™ Single Skirting HD provided effective seal against the belt, while preventing top cover damage.

ApronSeal™ helped for significant reduction in dust and spillage w/o undue wear to the belt surface.

PROBLEM

The Nuvoco Vistas Mejia Cement Plant in West Bengal, India has a production capacity of approx. 1.65 million tons per year. A 1400 mm wide belt conveyor that carries high-temperature clinker and limestone was using skirtboard seals fabricated in-house from a variety of materials on hand, including high-strength steel belt carcass and strips of rubber. The system was experiencing serious dust and spillage issues, as well as belt damage from the non-standard sealing components. Further, the company was investing significant manpower to continually clean up the fugitive material, which raised operating costs and reduced overall efficiency, while exposing employees to potential hazards from the moving conveyor.

SOLUTION

Operations personnel contacted Martin Engineering India with three goals in mind: control the dust and spillage at the load zone, prevent unnecessary wear and belt damage from the fabricated seals, and minimize the manpower cost for cleanup. The Martin team conducted a thorough inspection and recommended installing 45 meters of Martin® ApronSeal™ Single Skirting HD Heat Resistant Grade to withstand the 120°C material temperatures and provide an effective seal against the belt, while preventing top cover damage. The new seal is designed to ride gently on top of the belt, keeping dust and fine particles confined within the material flow, without undue wear to the belt surface.

RESULT

The new seal was installed by Martin technicians, and after 7 months of operation, the customer reports a significant reduction in dust and spillage, with a corresponding reduction in the manpower needed for cleanup. The work environment has been improved, and maintenance personnel have been reassigned to more productive tasks. According to a company spokesperson, "We are very happy with the performance, service, and overall functioning of the skirt sealing system." The upgrade has been so successful that the customer has ordered another 50 meters of ApronSeal™ to replicate the solution on another conveyor.

Martin Engineering • One Martin Place • Neponset, IL 61345-9766 USA
Ph. 800-544-2947 • Fx. 800-814-1553 • info@martin-eng.com • www.martin-eng.com