



PROBLEM SOLVED™ PAPER

SOLUTION: Martin® Tail Sealing Box, Martin® Wear Liner, Martin® ApronSeal Single Skirting, Martin® Dust Curtains, Martin® Support Cradles

INDUSTRY: Cement

LOCATION: CEMEX Kosmos
Louisville, Kentucky



Martin® ApronSeal™ Single Skirting and Martin® Support Cradles were installed.



To stabilize the belt path, each load zone now includes Martin® Support Cradles with stainless steel bars for high temperature applications.



The transfer point reconstruction project included installation of new chute walls, covers and dust curtains on all three conveyors.

PROBLEM

The clinker transport system had severe problems with the escape of spillage and airborne dust in the loading zones of three conveyors.

Conveyors #949, #949-3 and #950 carry clinker from the cooler to a storage structure for stockpiling. Conveyor #950, the last in the series of conveyors, is a 24-inch (610-mm) belt running at 650 fpm (3.3 m/sec). The others are 36-inch (914-mm) conveyors running at approximately 500 fpm (2.5 m/sec).

SOLUTION

Martin® Transfer Point products (with High-Temperature Components) were recommended to stop the spillage and dust problems.

To improve the clinker conveying, the plant agreed to upgrade the transfer points loading conveyors #949, #949-3 and #950. Installation crews from Martin® Services performed the project.

On all three conveyors, the work included installation of a Martin® Tail Sealing Box, steel chute walls, Martin® Wear Liners and chute wall covers with Martin® Dust Curtains. In addition, MartinPLUS® Services fabricated a new chute to transfer material from Conveyor #949 to #949-3.

Martin® Support Cradles were installed underneath the load zones to stabilize the belt's path to reduce spillage. To allow for high temperatures, the high-temperature cradles have bars with stainless steel tops.

The edges of the belt in the conveyor loading zones incorporate Martin® ApronSeal™ Single Skirting for high-temperature applications, effectively sealing the elevated material. Martin® ApronSeal™ Single Skirting is suitable for exposure to temperatures up to 275°F(135°C).

RESULTS

CEMEX Kosmos' plant management were very happy with the results of the project. Spillage and dust were controlled, and the new components stood up well to the elevated material temperatures.

Martin® ApronSeal™ Single Skirting is protected by U.S. Patent No. 5,016,747.

Martin® Support Cradle is protected by U.S. Patent No. 4,898,272.

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

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