



PROBLEM SOLVED™ PAPER

SOLUTION: CleanScape®, Martin® Impact Cradle, Martin® ApronSeal™ Skirting

INDUSTRY: Steel

LOCATION: Fos Sur Mer, France

TITLE: CleanScape® Belt Cleaner Eliminates Carryback at a Large Steel Plant



Material loss causing safety hazards and production loss



The CleanScape® Cleaner is the latest innovation in belt cleaning technology.



Elimination of material loss underneath the belt

PROBLEM

At a large steel production site, the coke unit supports continuous operations and downstream processes. Coke is produced by heating coal to about 1,250°C in an oxygen-free environment, creating a highly abrasive, carbon-rich material that is difficult to handle. In this high-temperature, high-throughput setting, conveyor systems must reliably transport large material volumes. However, persistent carryback on one conveyor belt caused material loss and spillage beneath the belt. Accumulated spilled material increased housekeeping demands, accelerated component wear, introduced additional maintenance and safety challenges for operating personnel during normal operation within this demanding process under continuous load conditions daily.

SOLUTION

Following a detailed on-site inspection, our Sales Engineering team, together with our partner Netco13, recommended the installation of a CleanScape® belt cleaner and a Martin® Impact Cradle. The impact cradle was installed at the loading zone to stabilize the belt, absorb impact energy, and prevent belt sag. In addition, Martin® ApronSeal™ Skirting was installed to provide a dual-sealing system that effectively controls fugitive material and dust along the skirtboard area. The CleanScape® belt cleaner was selected because it is highly suitable for applications with limited installation space, as the chute area was restricted. Its design requires minimal tensioner adjustment, easy to maintain in confined spaces & supports reliable low-maintenance operation.

RESULT

After 6 months of installation, the conveyor system delivered consistent and measurable improvements. Product loss beneath the belt was eliminated, significantly reducing the need for manual cleanup and ongoing maintenance intervention. Housekeeping conditions improved noticeably, creating a cleaner and safer working environment around the conveyor structure. At the same time, overall conveyor reliability increased, supporting uninterrupted coke handling and contributing to stable, continuous production. The customer expressed a high level of satisfaction with the long-term performance of the installed solution.