



PROBLEM SOLVED™ PAPER

SOLUTION: CleanScrape® Primary Cleaners

INDUSTRY: Steel

LOCATION: France

TITLE: CleanScrape® :The Optimal Solution for Space-Constrained Applications



Material spillage demanded frequent manual clean-ups, driving up labor costs and posing serious safety risks.



CleanScrape® installed in minimal space, ensures low wear on both the belt and the cleaner



CleanScrape® Primary Cleaner effectively reduced the material spillage and associated operational challenges.

PROBLEM

A multinational steel manufacturer in France, producing 78 million metric tonnes of crude steel annually, faced persistent material spillage beneath a critical conveyor belt. Due to space constraints in the chute, only a single secondary cleaner could be installed—proving inadequate for effective cleaning of the belt and resulting in carryback and spillage. This spillage not only necessitated frequent manual clean-ups, increasing labor costs, but also posed a serious safety hazards for personnel. The continuous spillage also caused damage to other conveyor components and the belt itself, leading to increased maintenance requirements, reduced productivity, and higher operational costs.

SOLUTION

To address the issue of material spillage, Martin Engineering's expert team, in collaboration with a trusted partner, proposed the installation of the CleanScrape® HD Primary Cleaner. Given the space constraints within the chute, the CleanScrape was the ideal solution due to its simple installation and minimal space requirements. The CleanScrape cleaner ensures low wear on both the belt and the cleaner, prolonging their effective service life. CleanScrape's tungsten carbide tips are completely corrosion-resistant, making it durable even in harsh environments. The cleaner requires minimal maintenance and comes with stainless steel installation kits for added durability. Additionally, it is suitable for use with reversible belts, enhancing its versatility.

RESULT

The results were overwhelmingly positive, with the plant reporting a significant reduction in manual cleaning frequency. The CleanScrape® Primary Cleaner proved to be the optimal solution for this space-constrained application and is highly effective in eliminating spillage, thus addressing all the associated operational challenges. With less material accumulating under the belt, wear on the conveyor system measurably decreased, which has greatly enhanced the longevity of the conveyor system. Following the successful performance of the first installation, a second unit has been fitted on a main conveyor belt feeding a blast furnace.