



PROBLEM SOLVED™ PAPER

SOLUTION: Martin® QC1™ HD & SQC2™ Mini Scraper

INDUSTRY: Steel

LOCATION: Fos Sur Mer, France

TITLE: QC1™ HD and SQC2™ Mini Cleaner Delivered Reliable Belt Cleaning.



Installation of Martin QC1™ HD to improve fugitive material under the belt.



SQC2™ Mini Secondary Belt Cleaner



The Patented "CARP" Constant Angle Radial Pressure design keeps a tight seal on the belt.

PROBLEM

One of the largest steel plants in France, processes approximately 25,000 tonnes of material per day. Within this high-capacity operation, a conveyor handling abrasive bulk material was experiencing severe carryback and product accumulation beneath the belt. The conveyor was equipped with a 1400 mm wide belt operating at 2.5 m/s and the belt was required to operate in both directions. At the time of inspection, another supplier's belt cleaner was installed, resulting in material adhering to the belt surface after discharge and being carried back along the return run. This caused large quantities of product to fall beneath the conveyor, increasing housekeeping requirements and leading to maintenance, safety, and productivity challenges.

SOLUTION

Following a detailed on-site inspection, Martin Engineering France recommended a complete belt cleaning solution for a reversing conveyor. The system comprised one Martin® QC1™ HD primary belt cleaner and two Martin® SQC2™ Mini secondary belt cleaners, selected to suit bidirectional operation. The QC1™ HD primary cleaner was installed at the head pulley to remove the majority of carryback. Its heavy-duty curved urethane blade delivers consistent cleaning on wide belts at moderate speeds while accommodating belt reversal and mechanical splices. Fast one-pin blade replacement enables safe maintenance, reduced downtime, and improved reliability. The SQC2™ Mini cleaners removed remaining fines and cleaned the belt more effectively.

RESULT

After seven months of operation, the belt cleaning system delivered consistent, measurable results. Carryback was eliminated, with no material accumulating beneath the conveyor, greatly improving housekeeping and reducing manual cleanup demands. Safer conditions were established around the conveyor structure, lowering maintenance effort and risk. The combination of QC1™ HD and SQC2™ Mini cleaner delivered reliable belt cleaning while minimizing wear on the belt and reducing maintenance requirements. The in-plant team confirmed that the problem had been fully resolved and expressed high satisfaction with the long-term performance of the Martin solution.