



# PROBLEM SOLVED™ PAPER

**SOLUTION:** CleanScape® Primary Cleaner S; SQC2™ Cleaner

**INDUSTRY:** Energy from Waste / Materials Recovery

**LOCATION:** Hamburg, Germany

**TITLE:** CleanScape® and SQC2™ Deliver Optimized Belt Cleaning Performance



Persistent carryback on most of the conveyors led to excessive cleaning demands & operational challenges.

## PROBLEM

The largest energy-from-waste plant in the Hamburg region of Germany, processes around 320,000 tons of waste annually. The facility handles a variety of materials and recovers energy in the form of electricity and heat, while also achieving material recovery. A key part of the operation are its 40 conveyor belts - from 800mm to 1200mm in width and typically running at 1.3 m/s - used to transport abrasive materials through the process. Persistent carryback on most of the conveyors led to excessive cleaning demands, posing a problem for productivity and creating potential safety risks. Previous solutions from a competitor failed to deliver significant improvement.

## SOLUTION

Martin Engineering's experts were invited to visit the site and recommended an innovative belt cleaning solution - the CleanScape® Primary Cleaner and the highly effective SQC2™ Secondary Cleaner. Both types of cleaners are perfectly suited for tough conditions where space is limited. They have long service life and deliver effective belt cleaning without risk to belt or splice. CleanScape® Primary Cleaner is especially durable and has a unique design: it is installed diagonally across the discharge pulley forming a three-dimensional curve, and incorporates a matrix of tungsten carbide tips. While applying minimal pressure to the belt, it removes hardened material without damaging the belt.

## RESULT

A total of 30 CleanScape® Primary Cleaners and 5 SQC2™ Secondary Cleaners were installed on the affected conveyor systems. The installation significantly reduced the amount of cleaning required, as well as unscheduled downtime, thereby reducing the cost of operation. Thanks to the optimised belt cleaning performance brought by the CleanScape® Primary Cleaner, as well as by the combination of the primary and secondary cleaners and their durability, the plant achieved a higher level of productivity and reduced the maintenance costs significantly. The customer is very content with the efficient performance of the Martin products.



CleanScape® Primary Cleaner installed diagonally for high-efficiency belt cleaning with minimal belt wear



CleanScape® and SQC2™ Cleaners improved belt cleaning performance and reduced downtime