



# PROBLEM SOLVED™ PAPER

**SOLUTION:** CleanScrape® Primary Belt Cleaner

**INDUSTRY:** Power

**LOCATION:** Yeniköy-Kemerköy Energy, Kemerköy Power Plant, Muğla, Turkey

**TITLE:** CleanScrape® - High Cleaning Efficiency with Low Maintenance Costs



Poor belt cleaner performance was resulting in carryback, spillage and excessive maintenance.



The next-generation CleanScrape® belt cleaner was selected thanks to its many advantages.



With outstanding performance and durability, CleanScrape® delivered a definitive solution.

## PROBLEM

Kemerköy Power Plant is a critical energy facility with a total capacity of around 700MW. Generating almost 4 billion kWh a year and with a daily consumption of 21,600 tonnes of domestic lignite, the plant operates continuously with an extensive conveyor system. On the 800mm bottom ash and slag conveyors beneath the boiler, polyurethane belt cleaners were wearing out rapidly due to the abrasive material, with replacement required on average every 20 days. This also meant daily cleaning, at least two maintenance interventions per month, continuous labor costs, risk of stoppages, and significant time loss for operating teams. On these belts, polyurethane cleaners not only had a short service life but also failed to provide full cleaning performance.

## SOLUTION

Seeking a permanent, effective and low maintenance solution, plant management consulted with Martin's experts and conducted a detailed on-site inspection. The next-generation CleanScrape® belt cleaner was selected thanks to its many advantages:

1. Specially engineered for abrasive materials
2. Very low contact pressure leading to extended belt life
3. Performs better than traditional primary and secondary cleaner
4. Curved design for maximum surface contact area
5. Easy installation and virtually zero maintenance requirement,
6. Cleaner tip service life up to 12 months (for this application)
7. Reduced conveyor downtime due to low-tension operation.

## RESULT

Clear and measurable gains were achieved in terms of cleaning, maintenance and labor with a 75% reduction in maintenance and inspection time. Daily cleaning was reduced to once per week and replacement went from every 20 days to every 12 months. Ultimately, plant downtime was significantly reduced and thanks to the high level of satisfaction and clear performance improvement at Kemerköy, another thermal power plant in the region also invested in CleanScrape®. CleanScrape® delivered a definitive solution at Kemerköy by reducing maintenance workload, providing stand-alone belt cleaning performance, and eliminating chronic issues caused by polyurethane belt cleaners.