



A Starscreen secondary cleaner

Striving for efficiency at a leading UK cement works near London, the plant's maintenance manager knew all about cement production after working in the industry for nine years before being appointed to his current role looking after the equipment and the maintenance team, but he had a nagging problem that was making optimum production and smooth maintenance elusive. He urgently needed to reduce the amount of time that was being spent cleaning underneath the plant's conveyors – a laborious task that was distracting staff from other vital repair and preventative maintenance work, and proving expensive.

Conveyors are critical in many production processes, and these were no different, conveying chalk in all its forms – including raw chalk, chalk slurry and flint with chalk fines – through the plant. However, this broad variation in the raw material presented a variety of belt cleaning challenges. The chalk adhered to the belts in all its forms but proved particularly problematic when wet. As a result, the maintenance team were spending at least two hours a day cleaning material carryback from underneath the conveyors.

A number of alternative belt scraper systems in a range of combinations had been installed in an attempt to solve the problem, but despite these efforts the problem persisted. In desperate need of a solution to their conveyor carryback and cleaning problems, the site turned to ProSpare to see if they could help.

Having visited the site and assessed the conveyors in question, the ProSpare bulk-handling team recommended and subsequently installed Starclean belt cleaners on every belt at the site. Primary- and secondary-position cleaners were specified

according to the conveyor structures, but all the cleaners were fitted with replaceable tungsten carbide blades and the 800-series quick-release tensioning device.

800-series tensioning device



The cleaning efficiency delivered by Starclean has reduced clean-up requirements by at least two hours a day, saving the maintenance team more than 500 hours and £12,500 a year.

Reaping the benefits of the new belt cleaners, the maintenance manager said: 'The time we've saved can now be better spent on maintaining equipment elsewhere on site, contributing significantly to the smooth running of the plant. A particularly noticeable result was highlighted on our flint conveyor, where a single Starclean belt cleaner was installed in place of three other scrapers, resulting in a notable increase in cleaning performance.'

'I'm more than happy with Starclean. Not only has it solved the issue of spending two hours cleaning under the conveyors, all of the blades have lasted at least 12 months and the scraper blades on one particular conveyor are still in operation after 18 months.'

ProSpare say Starclean improves the conveying process and saves clients time and money by significantly reducing conveyor downtime, maintenance, cleaning and dust emissions, as well as eradicating health and safety concerns associated with material carryback. Its innovative twist-swing tensioning mechanism ensures optimum blade contact with the belt, regardless of individual segment wear, allowing for superior cleaning performance, minimal maintenance and optimal cost-effective operation.

The simplicity of Starclean's quick-release tensioning devices and rapid-change, slot-in blade design ensures operators can quickly and safely carry out tool-less maintenance, taking just seconds to remove, clean and refit blades.

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