

## CASE STUDY: K-Smartscraper® Primary Belt Cleaner

<b>Kinder Australia Product:</b>	<b>K-Smartscraper® Primary Belt Cleaner</b>
<b>Product Category:</b>	Conveyor Belt Cleaning
<b>Location:</b>	<b>Asia Pacific Region</b>
<b>Conveyed Materials:</b>	Glass Furnace Slag
<b>Conveyed Belt Speed / Rate:</b>	1.2 MPS / 65-100 TPH
<b>Installation Date:</b>	2016

### CHALLENGE:

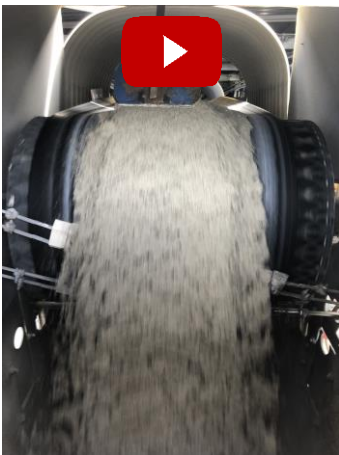
- Reduce carry back issues
- Frequent production down-time
- Excessive product wastage and material spillage
- Reduce maintenance clean up costs

Since 1991 our Asia Pacific cement producer customer leads the way in the supply of general purpose and specialist cements. In 2015, the operations expanded with a new plant opening nearby the original plant. Operating 24/7, the new plant's core business focusses on the production of slag and white cement, servicing a clientele of small concrete firms both locally and interstate. The slag product is also predominately used as 50% blend in the cement process as well as a blend in road construction jobs.

The plant previously utilised a H-Type Tungsten segmented belt cleaner with 3 main segments, this belt cleaner was specified in the plant's original design.

Due to the belts uneven surface, the segmented tungsten tips were unable to contact the belt with even pressure. At times, this led to significant carry back issues, wasted product would drop approximately 1 to 2 metres back from the head pulley. Manual shovelling and vacuuming was required to clear the accumulating fine material spillage ant-hill piles to avoid any potential tripping and safety hazards. Due to the lack of on-site maintenance resources, the cleaning of material spillage would also be outsourced through an external cleaning company, this affected the operations bottom line.

**BELOW** – K-Smartscraper®  
Installation, Paired Application.



*To date the plant has been very pleased with the product's cleaning performance, the K-Smartscraper® Primary Belt Cleaner has been ear-marked for installation for other carry back affected areas within the plant.*



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Issue: 202102

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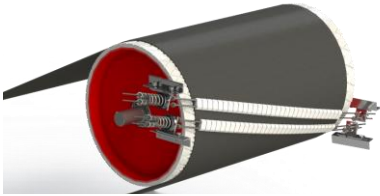
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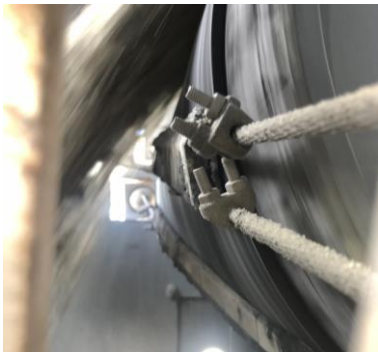
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## CASE STUDY: K-Smartscraper® Primary Belt Cleaner

### SOLUTION:



**K-Smartscraper® Primary Belt Cleaner – Multiple Applications**



### RESULTS:

- Exceeded customer's product performance expectations
- Carry back issues averted
- Material spillage wastage reduced
- Improved on-site productivity and profitability due to reduction in clean up & costs.

For many years, the original plant utilised the single K-Smartscraper® Primary Belt Cleaner and have been extremely happy with the belt cleaning, reliability and durable performance of the K-Smartscraper®.

With that in mind, the decision to install the K-Smartscraper® Primary Belt Cleaner at the nearby new plant was easy, this time electing to install a paired set of K-Smartscraper's on the one pulley to maximise the belt cleaning. The installation of Kinder's K-Smartscraper® paired version takes belt cleaning to the next level, with greater surface contact with the belt, this effectively reduces carry back which in turn, increases the life of return rollers and improves belt tracking.

Familiarity with the K-Smartscraper® at the original plant made the installation this time around very simple and straight forward. **Unlike most other primary belt cleaners, the low profile compact size of the K-Smartscraper® enables more than one cleaner to be installed in the preferred primary position.**

**Since the installation of the K-Smartscraper®, the Plant Manager can confidently report the K-Smartscraper® has undergone continuous, gruelling 24/7 operation and only after 14 months will the K-Smartscraper® ceramic chips require replacement.**

*"The rigid segmented tungsten tips on the previously installed H-Type cleaner allowed a build-up of fines, this eventually caused a gap between the conveyor belt and the belt scraper. This carry back issue led to negative impacts on the overall cleaning performance, as well as replacing the old cleaner at a shorter interval compared to the high-performing ceramic tips on the K-Smartscraper®".*

Plant Manager elaborates, very pleased with the product's cleaning performance, the K-Smartscraper® Primary Belt Cleaner has been ear-marked for installation within other carry back affected areas within the plant.



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