Success Story

Grain Handling - Spillage, Belt Support & Hygiene







Kinder Australia Product:

Product Category:

Location:

Conveyed Materials:

Conveyor BW / Capacity:

K-Sure® Belt Support System

Conveyor Belt Support

Geraldton, Western Australia

Grain

1050mm BW - 4.3mps | 1000 tonnes per hour

K-Sure®: Solving belt sag and achieving six years of spill-free performance.

OVERVIEW

Our customer is a major player in the Australian Grain Handling sector. Located in Geraldton Port, their core business revolves around export terminal shipping predominantly grain and other agricultural products.

CHALLENGE

In the past, standard idler rollers have traditionally been installed on site. Maintenance teams identified conveyor belt sag between idlers was the underlying cause of material spillage.

Gaps present in the system can potentially lead to emissions, resulting in costly product wastage and frequent exposure to pest/rodent contaminations.

Hygiene, cleaning and spillage are considered major pain points for this Agri-Product Operator, not to mention the safety hazards of trips and falls from the oily residue left by some bulk materials.

Maintenance time and resources were also allocated and necessary to ensure site hygiene was always maintained to a high standard.

- Resolve hygiene, cleaning and spillage issues.
- Lost production time due to cleaning up spilt materials.
- Minimise safety hazards of trips and falls
- Escalating cleaning up and maintenance resources costs.



Photo: K-Sure® Belt Support System installed at transfer point.

SOLUTION

A Kinder Field Applications Engineer conducted a thorough inspection of the customer's spillage, hygiene and material loss challenges on site.

<u>K-Sure® Belt Support System</u>, a highly effective conveyor belt support and spillage containment solution was installed around the transfer point problem area.

The issue of belt sag has been corrected by the K-Sure® Belt Support System's slider rails. The elimination of belt sag provided a flat profile that allowed the skirting to uniformly seal within the transfer point.

Wing rollers were substituted with the support system's universal adaptor brackets and low friction polymer belt support slider rails. Due to the application the site requested static reduced rails as an additional upgrade.





RESULTS

- Spillage reduction at transfer point has minimised pest/rodent contamination of grain product.
- Improved material flow.
- Elimination of cleaning up time and resources.
- Significant reduction in dust emissions.



Photo:
K-Sure®
Belt
Support
System
installed
at transfer
point.

The maintenance team observed immediate positive results from the K-Sure® Belt Support System installation. The grain operation has achieved a significant reduction in material spillage at the transfer point. The problems of pest/rodent contamination, associated hygiene issues and dust emission has been greatly minimised due to spillage reduction. Improved material flow has resulted in minimal production downtime. Cleaning up time and maintenance resources around the transfer point is no longer required.

Six years after initial installation, a follow up inspection of the K-Sure® Belt Support System revealed minimal wear. With extremely positive results, the site is now looking at utilising this technology on other transfer points within the export terminal.

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