

CASE STUDY: K-Containment Seal

Kinder Australia Products:	<u>K-Containment Seal</u>
Product Category:	Conveyor Belt Skirting and Sealing
Product:	Concrete
Customer:	New Zealand Concrete Supplier – quarry products
Production Rate:	300 tonnes per hour
Belt Speed:	1 metre per second

Previous problem:

- *Belt tracking*
- *Spillage*
- *Premature Wear*
- *Roller Seizure*
- *Health & Safety Hazards*
- *Unscheduled Labour Clean-Up Costs*

Our customer operates with a conveyor transfer point fed by a second conveyor that has a feed angle of 90 degrees. The weight pressure of the falling material was pushing the conveyor belt itself off-centre, becoming **misaligned and causing material spillage**.

At a production rate of 300 tonnes per hour, the fugitive material quickly accumulated, causing the trough rollers to seize up as well as creating a trip/slip hazard to workers. The associated conveyor skirting and steel holding plate in close proximity was subsequently showing signs of premature wear. Located in a difficult area, the 12mm traditional rubber skirting could not be changed without considerable effort.



Above: **BEFORE** pic showing 90 degree feed conveyor angle.

Right: **AFTER** pic showing contained material



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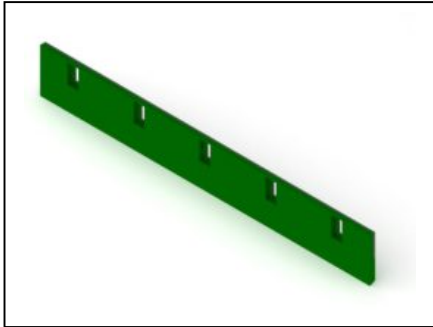
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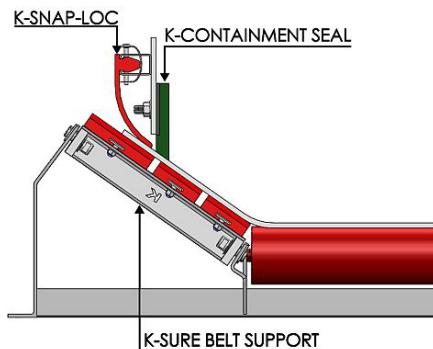
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Resolution:



K-Containment Seal is lightweight to manoeuvre and simple to install with a slotted arrangement that presents on the outer of the chute wall. When wear eventually occurs, it can be adjusted and lowered to extend its wear life even further.



Pictured above is the ideal arrangement of K-Containment Seal, with K-Snap-Loc® Skirting and K-Sure® Belt Support. This combination creates the essential seal, optimising performance potential of each component.

Belt misalignment caused by material loading effects is a common problem. Spillage should be cleaned-up quickly otherwise it can create **personal injury risks**. If not resolved effectively, the problem of spillage can lead to **significant structural damage** to the conveyor as well as lengthy interruptions to production.



K-Containment Seal was installed inside the chute wall and the spillage problem at the feed conveyor from trucks to the storage aggregate bins has been resolved - our customer is delighted.

K-Containment Seal is available in different engineered polyurethanes depending on the level of abrasion resistance required. It also has steel-backing for enhanced durability which was ideal for the high internal pressure experienced at this transfer point.

Already it has exceeded the operational performance of the previous skirt. In time, when wear signs are observed, it can be adjusted lower so that once again a tight seal is achieved. The low friction properties of K-Containment ensures that the risk potential for material entrapment between the skirt and the belt is minimised.



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