

**CASE
STUDY**

**LOAD ZONE™
CONTAINMENT SKIRTING**

PRODUCT: Load Zone™ Containment Skirting
PRODUCT CATEGORY: Conveyor Skirting & Transfer
LOCATION: Southern New South Wales, Australia
CONVEYED MATERIALS: Hard Rock / Granite
INSTALLATION DATE: February 2013

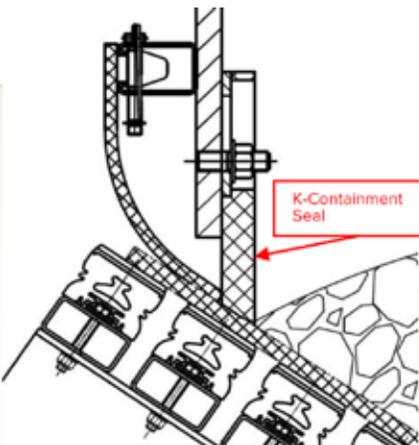
PROBLEM DESCRIPTION:

The customer operates a hard rock quarry in the southern tablelands region of New South Wales with the capacity to produce 5 million tons per year.



Above: Photo of the Load Zone Containment Skirting installed.

Below: Cross section diagram showing proximity of Containment Skirting to the conveyor belt.



Looking to find a better solution to the cost of regularly replacing skirting, involving maintenance time costs, schedule shutdown costs, as well as the actual skirting product replacement costs, the customer prepared the following financial comparison in preparation for a trial run of Load Zone Containment Skirting:

Conveyor 1:

- Previously every month, the existing skirting had to be replaced on both sides of the conveyor. It took 2 people approximately 1 hour.
- Also, the skirting needed to be lowered every 2 weeks. This took 2 people 15 minutes.
- Prior to the trial, the calculations confirmed that it took 2 people 2.5 hours a month to maintain Conveyor 1.

Conveyor 2:

- Previously every week, the skirting had to be replaced on both sides of the conveyor. It took 2 people approximately 1 hour.
- Prior to the trial it was calculated that it took 4 hours a month to maintain Conveyor 2.

Clean Up:

- Due to the spillage caused by the previous skirting, it took 1 person approximately 45 minutes a day to hose off the slab under the conveyors. It took 1 person a total of 15 hours a month.



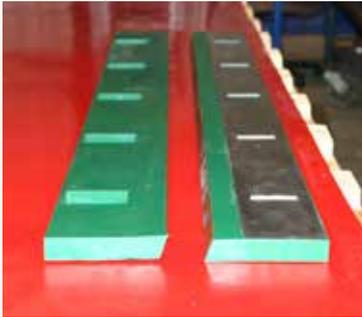
PROBLEM DESCRIPTION, CONT:**Total labor costs:**

- 28 hours @ \$50 per hour = \$1400 per month in labor

Total skirting replacement costs (@\$16 per meter):

- Conveyor 1: 13 meters = \$208
- Conveyor 2: 4 meters x 2 times per month = \$128
- Total expenditure = \$336 per month

(Plus increased risk of manual handling incident while hosing or changing skirts.)

Total investment: \$1736 per month**RESOLUTION:**

The customer decided to trial the Load Zone Containment Skirting on Conveyor 2 first, as it only needed 2 panel lengths to seal the belt. As each panel cost \$405, the initial investment in the trial of the longer-lasting polyurethane skirt was \$900. The initial set up of the skirting took 2 people 2 hours; using the same labor cost calculations as previous, it was just \$200, with a further anticipated \$50 (30 mins) for adjustments for the month ahead.

Total trial investment: \$1150 for the first month

Ten months later, the same Load Zone Containment Skirting panels are still in operation. They have not needed replacing – saving the customer product replacement costs as well as the labor costs involved in their change out. Production has also not been compromised as no shutdowns have been required and the new skirtboard works effectively with the existing rubber skirts. Finally, the risk of associated manual handling incidents has been eliminated.

Due to the effectiveness of the Load Zone Containment Skirting in reducing spillage, the customer has also experienced a significant reduction in the costs spent daily on labor for hosing off the slab under the conveyors daily.

Overall, the customer has calculated **savings of \$12,500 since installation** of the Load Zone Containment Skirting 10 months ago. Now Conveyor 1 also has these skirts.

**LOAD ZONE CONTAINMENT
SKIRTING BENEFITS:**

- Heavy duty internal skirt
- Contains spillage reliably at the loading high pressure points
- Longer lasting wear life over quality rubber skirting/ steel liner
- Reduces maintenance and labor costs

KEY FEATURES:

- Combined with steel backing for extra strength
- Slotted panel allowing for easy adjustment