

## Case Study – K-Magnaplug®

<b>Product:</b>	<b>K-Magnaplug®</b> – Reusable Wear Repair Magnetic Patch L190mm x W280mm x H38mm, Weight 3kg
<b>Product category:</b>	Flow and Anti-Wear
<b>Location:</b>	East Victoria
<b>Conveyed material:</b>	Brown Coal
<b>Rate:</b>	2400 tonnes per hour
<b>Installation date:</b>	September 2015

### Previous problem:

Our customer operates a number of brown coal transfer chutes in the flow of the bulk material between an open cut mine leading to a power station. This particular chute is positioned at a height of approximately 2 metres off the floor, where it leads to the receiving conveyor. The chute opening is approximately 1200mm wide, tapering down to 700mm.

### The Cost of Material Spillage:

- Loss of transferred material
- Labour clean-up costs
- OHS injury costs
- Downtime loss of production costs
- Damage costs to surrounding conveyor structure
- Creation of Permit to Work administration requirements

The chutes are ageing and are beginning to show signs of deterioration. A large coal spill was reported and a small hole in the chute wall was confirmed by as being the cause of this spillage.

Continuous production needed to be maintained for the transfer point, so the hole needed to be fixed urgently, whilst the increasing volume of spillage needed to be cleared away requiring a bobcat.

***“The equipment is not due for replacement, so we were keen to resolve this problem quickly with an outcome that would not interfere with our production schedule or require any further labour resources.”***

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### Resolution:

Our customer was able to resolve the leak immediately by applying the magnetic wear and repair K-Magnaplug®.

### K-Magnaplug®, Reusable Wear Repair Magnetic Patch

#### Key benefits:

- Easy application/installation.
- No tools – snaps on and off.
- Reduces clean up and downtime.
- Withstands strongest of material impact force.
- Reusable.
- Abrasion resistant.
- Industry proven.



“The patch was very easy to apply – it was lightweight and didn’t require any special tools. First, we placed the bottom section of the patch on one side of the hole, and then hinged it centrally across the hole and secured it with the other section of patch. Straight away the leak was stopped.

We monitored the area overnight in case the impact of the transferred material might throw the K-Magnaplug® off. But it didn’t and so we were then able to plan for the repair efficiently and permanently without requiring any conveyor shutdown time.

Because we didn’t need to allocate any additional emergency resources to this urgent repair task, which can cost approximately \$1000 a day, this problem was resolved very cost-effectively as well as quickly.”

#### Customer feedback September 2016 (12 months after initial purchase):

“Generally, we apply the patch until the next planned maintenance opportunity for repair. Usually the following week.

The patch has been a terrific tool to enable us to concentrate on our planned routine maintenance without breaking into our program to attend to break in work.”

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