

## CASE STUDY: K-Redi-Liner® Ceramic

<b>Kinder Australia Product:</b>	<b><u>K-Redi-Liner® 50mm B93 Ceramic</u></b>
<b>Product Category:</b>	Flow & Anti-Wear
<b>Location:</b>	<b>New Zealand</b>
<b>Conveyed Materials:</b>	Alluvial Gravel 1600 kg/m <sup>3</sup>
<b>Conveyor Belt Width/Speed:</b>	600mm Belt Width / 1.5m/sec
<b>Installation Date:</b>	May 2018

### CHALLENGE:

- Maximise mobile plant crushing & screening productivity.
- Unprotected steel plates within high impact zones
- Increasing costs and production down-time to replace wear plates every three months.

Our prominent quarry customer produces and supplies high quality, sustainable concrete, aggregate and quarry solutions across New Zealand and Australia. The new mobile plant stationed at New Zealand's South Island was built to an original equipment manufacturers specification. The plant's project scope delivered a mobile plant that accommodated a specific tonnage and product, localised intricacies such as type of rock or abrasiveness properties are not specifically factored in during the plant's design process.

Being a mobile plant means their operation can easily load the mobile plant onto a truck to maximise the productivity of its screening and crushing core business at various locations within a geographical area. Within the mobile plant's high impact transfer zones, the operation was accustomed to utilising 4mm wall thickness steel plates, left unprotected as new equipment. Over time, gruelling screening & crushing production and exposure to the sheer abrasive properties of the transferred quartz-based gravel was observed by maintenance teams as the leading contributor to the catch pen wall and chute wearing out from the return belt back into the impactor.



**LEFT**  
*K-Redi-Liner® Ceramic Installation*

*Through the impressive K-Redi-Liner® Ceramic installation our customer reports eliminating the need for patch-up/repair jobs in this high impact chute area every production shutdown.*



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Issue: 202102

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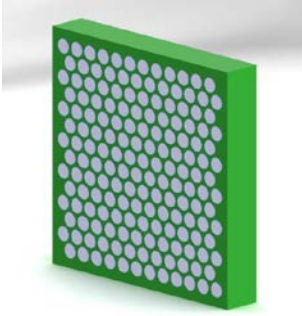
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### SOLUTION:



#### Product Links

[K-Redi-Liner® Ceramic](#)

The high frequency, escalating costs and production downtime of replacing existing steel wear plates every three months lead maintenance teams to seek other more effective wear protection solutions to ensure the screening and crushing core business operates to maximum productivity, profitability and longevity.

Kinder's technical team recommended the K-Redi-Liner® Ceramic modules be installed within the targeted remedy areas of the high wear-prone chute and catch pen wall. Clear and effective installation instructions provided to maintenance fitters meant the installation was quick, secure and seamless via the liners bolt-in system functionality.

Through the impressive K-Redi-Liner® Ceramic installation our customer reports eliminating the need for patch-up/repair jobs in this high impact chute area every production shutdown. Wear-prone areas of the operations have been rectified, with cost savings realised by the quarry operator extend to not needing to replace prior utilised steel plates every three months. It is envisaged that further costs reductions can also be achieved through the replacement of the wear liner where it's most needed instead of replacing the entire liner, and panel rotation flexibility a key feature of the K-Redi-Liner® available to further extend wear life.

So confident of Kinder's promise of a highly durable and longer lasting anti-wear solution, our quarry operator has implemented the installation of **K-Superline® Polyurethane Lining** (G83 PU 12mm and B93 PU 25mm sheet) in other areas of their operations, within both the fixed and mobile plant operations.

All signs point in the right direction with further productivity improvements gained through the successful trial and installation of Kinder's conveyor skirting solutions, **K-Superskirt® Engineered Polyurethane** and **K-Sure® Belt Support Systems** have also been installed on-site within 4 important conveyors, all delivering positive outcomes for the operations.

### RESULTS:

- *Wear problems solved*
- *Product performance well above expectations.*
- *Cost savings realised, with extended wear life of panels.*
- *Further on-site productivity improvement gains through conveyor belt support and skirting/seal installations.*



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