

COAL SCREEN UNDERPAN



SUMMARY

Industry: Coal

Product: Chesterton® ARC SD4i and

Chesterton® ARC BX2

Plant: Coal Screen Underpan

Location: Moranbah, QLD, Australia

Summary: Removal of failed polyurethane and protected with Chesterton® ARC

ceramic composite coating.





PROBLEM DESCRIPTION

- The underpan was originally coated with polyurethane. The polyurethane was failing due to inter-coat adhesion issues and was coming off in sheets.
- This was causing pump blockages and leaving the under-pan susceptible to premature corrosion issues.











SOLUTION

- Imatech removed the polyurethane using ultra high water pressure blasting.
- The underpan was then abrasive blasted to our specifications.







SOLUTION

Chesterton® ARC BX2 trowelable ceramic coating was then coated at a thickness of 6mm directly under the inlet; assisting with a greater protection against aggressive wear.













RESULTS

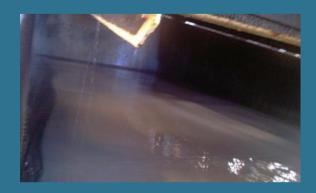
The following photos are from an inspection six months later. It can be observed that the top coat of Chesterton® ARC SD4i is untouched and the Chesterton® ARC BX2 coating is intact.













SOLUTION





After welding, all surfaces to be Chesterton® ARC coated were abrasive blasted to SA $2\frac{1}{2}$, with an angular profile between 75-125 microns. The welders could not reach behind the titanium plate, so Chesterton® ARC 858 was "injected" into the cavities and around the edging of the tube sheets.

