

Project Profile



Inspection of Slurry Pipe

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|---------------------------|-----------------------------------|
| Application Type | Pipe Internal Corrosion / Erosion |
| Client | Withheld (Aluminium Industry) |
| Inspection Company | ALS Industrial |
| Location | WA, Australia |
| Date | July 2018 |

ALS were engaged to inspect 6km of slurry pipeline as part of the ongoing monitoring of the pipes in WA. The pipes wear down due to the abrasive nature of the slurry, and in some cases, small variations in the internal surface can lead to a build-up of scale in that location, which then causes vortices on the down-stream side that wear away the material much quicker.

This has been known for some time but the standard point thickness readings do not always detect the issue.

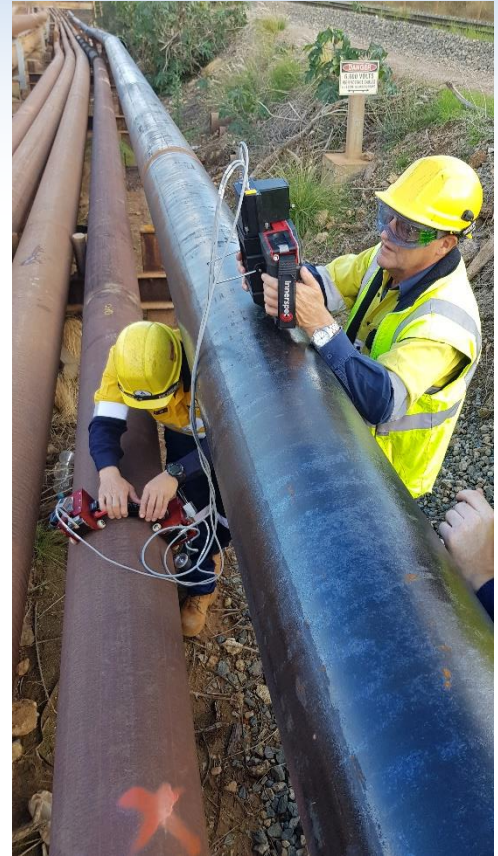
The solution in this case was to use the Innerspec MRUT-A equipment to do a full-length, full circumference, full wall thickness scan of the pipe.

The scan was conducted in a matter of weeks, and detected a number of areas to be monitored, and at least one area where the above mentioned defect had reached a point where it requires repair. These areas would not have been detected using other methods with the same timeframe and budget.

The image to the bottom right shows a typical screen-shot of what the strip-curve looks like at the location of this type of defect. This is indicative of the beginning of a defect rather than a significant wall loss.

These defects can be identified even on pipe with variable erosion profiles, and it is done at a slow walking pace.

Structural Lines provided on-site training and support, and the client and inspectors are very happy with the results!



Increase in thickness under the scale before the defect

Defect: Decrease in thickness after the scale.