

CASE STUDY: MAGNEFAST™ CERAMIC LINERS ENABLE RAPID SHUTDOWN INSTALLATION AT 24/7 GOLD LEACH PLANT

A gold leach wet process plant operating continuously 24 hours a day, 7 days a week had not experienced a full shutdown since commissioning more than three years ago. The plant's leach hoppers were exposed to aggressive wear conditions, requiring a lining solution that could be installed within a tightly constrained shutdown window while delivering improved service life and long-term reliability. With the first planned shutdown approaching, Elastotec was engaged to provide a solution that balanced installation speed, wear resistance, and operational confidence.



LOCATION: Near Townsville
YEAR: 2025
APPLIC.: Gold Mineral Process Leach Hoppers
SOLUTION: Magnefast™ Ceramic Liners

ISSUES ON SITE:

The leach hoppers had previously been protected with cold-bonded rubber lining, which had failed on multiple occasions under sustained wet process conditions. Progressive wear resulted in breakthroughs to the hopper steel skin, creating an ongoing maintenance risk.

To maintain continuous production, site personnel were forced to carry out temporary welded steel patch repairs while the plant remained operational.

When the first shutdown was finally scheduled, the available

time was insufficient to complete a full cold-bonded rubber strip and reline, placing the operation at risk of extended downtime.

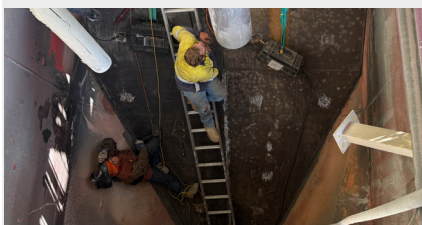


THE SOLUTION:

Given the limited shutdown window, Elastotec recommended the Magnefast™ Ceramic Lining System as the most suitable solution. The system was selected for its rapid mechanical installation method, eliminating curing delays associated with cold-bonded rubber, while delivering significantly longer wear life in high-abrasion wet process environments.

The opportunity to resolve the re-lining challenge within a four-day shutdown was achieved using Magnefast™ ceramic liners, with the project encompassing steel re-skin repairs, primer coating, and complete Magnefast™ panel installation.

This integrated and well-planned approach ensured all activities were completed safely, efficiently and within the tight shutdown constraints, minimising operational risk and downtime.



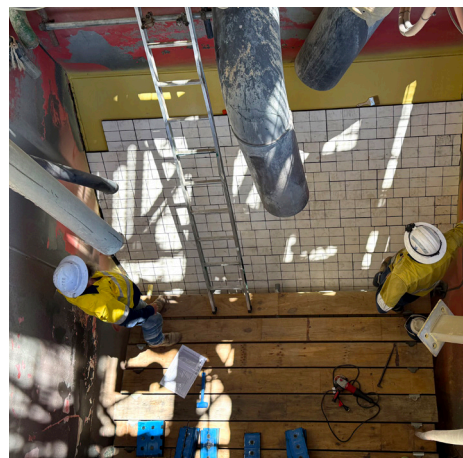
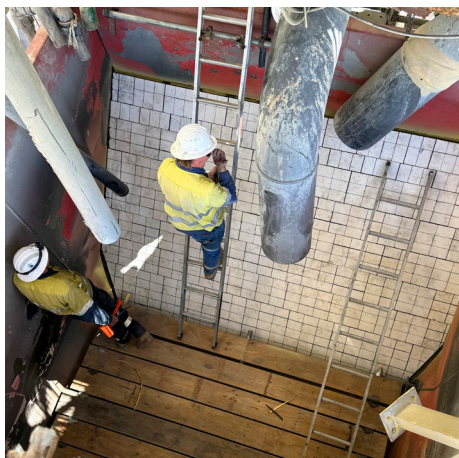
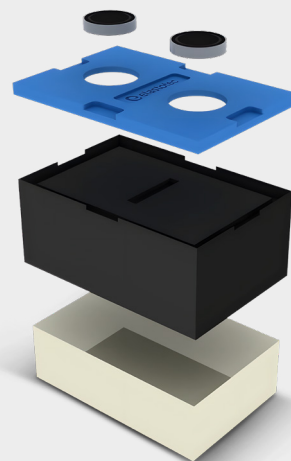
The damaged hopper wall was re-skinned with 8 mm thick steel to provide a clean flat surface for the Magnefast™ ceramic liners.

THE RESULTS:

The project was completed with a full day to spare, allowing the plant to return to operation ahead of schedule. The coordinated efforts of Bitrac, site maintenance personnel and the installation team ensured a smooth execution across all stages of the shutdown.

Both the client's maintenance team and the installation crew expressed high levels of satisfaction with the ease of installation, quality of workmanship and overall project delivery.

The successful outcome demonstrates how early identification of the right lining solution, combined with strong project management can significantly reduce shutdown risk while improving long-term wear performance.



 **magnefast™**

Completed
ahead of
schedule

Maintenance &
installation crews
are happy with
the ease of install

Long-term
reliability now
significantly
improved

Plant returned
to operation
on time

Proven
performance for
24/7 operations