



The safe and sanitary way to scale and repair a water treatment pipe

CASE STUDY

THE PROJECT

To conduct a clean-and-repair operation to a damaged pipe riser in a difficult-to-access location of a large water treatment well.

KEY CHALLENGES

- **Operational Disruption:**
To access the repair site, the well's water level had to be dropped significantly. Therefore, in order to limit operational disruption, we had to work quickly to clean the site, assess the damage and make repairs.
- **Difficult Access:**
Due to the location of the repair site (halfway down a 14m deep water treatment well), the on-site maintenance team had been unable to use their normal overhead crane and man box to secure safe access for repair work.
- **Technical Repair:**
Completing the repair required, assessment of the damage (a big hole in the pipe) and installation of a permanent solution (with technical input from the on-site maintenance team) that was capable of withstanding high pressure.

CLIENT

Local Council

SITE OF WORK

Water Treatment Facility,
South of Brisbane

TYPE OF WORK

Water Treatment Pipe Repair

SCOPE OF WORK

On-Site Risk Management
Height Safety System
Rope Access Solution
Damage assessment
On-Site Repair Work

KEY RESULTS

- ✓ On-site risks reduced
- ✓ Safe access provided
- ✓ Pipe repair complete
- ✓ Time and cost minimised
- ✓ Minimal operational disruption

OUR SOLUTIONS

- **Industrial Rope Access Specialists & On-Site Maintenance Team:** We mobilised specialist industrial rope access operators to liaise with the on-site maintenance team and get the repair work done quickly, safely and with minimal disruption. All operators were familiar with industrial environments, trained to navigate difficult or confined spaces and trade-skilled.
- **Edge Management System & Winch Kit:** We reconfigured an Arachnipod modular edge management device to establish a secure height safety system suitable for the confined space (could not support a typical A-frame or tripod setup). Then we issued gas detection kits and rigged-up a Harken Industrial Winch Kit to provide safe rope access up and down the vertical pipe riser for the repair team.
- **Stainless Steel Wrap Bandage & Repair Clamps:** After water blasting, sanitising and assessing the repair site — we installed a 100kg stainless steel wrap bandage around the circumference of the pipe (secured with a series of stainless steel repair clamps welded on-site). This provided a high-quality, non-corrosive, permanent solution.

VALUE ADDED

Despite several attempts, our client's experienced on-site maintenance team had been unable to safely access the repair site to assess and address any damage.

This represented an ongoing risk to the smooth operation of the plant — and left them exposed to having to conduct an expensive (and potentially dangerous) emergency repair should the damage escalate suddenly.

Working with our industrial rope access team, they were finally able to progress the repair. From a position of safety, they directed the team's assessment of the repair site and oversaw the repair itself.

On their behalf, our specialist industrial rope access team got the work done with no wider operational disruption to the water treatment facility.

