



## Height Safety Solutions for an Underwater Mission

## CASE STUDY

### THE PROJECT

The inspection of an isolated underground industrial pipe and submerged actuating valve. This included real-time reporting on damage to the pipe's internal lining or valve due to corrosion.

### OUR BRIEF

To provide the inspector — a professional diver — with safe access, risk management and rescue/recovery services (if needed).

### KEY CHALLENGES

- **Difficult Access:** The inspection site was isolated and a long distance from the entry point.
- **Confined Space:** The path to the site was long and narrow — one-way-in, one-way-out.
- **Underwater Environment:** Inspecting the site required the use of heavy, bulky diving gear.
- **Solo Operation:** Due to space, the inspection site could only be accessed by one person.
- **Risk Management:** Initiating a rescue or recovery (if required) would be extremely difficult.

### INDUSTRY

Infrastructure

### SITE OF WORK

Sunshine Coast

### SCOPE OF WORK

Safe Site Access/Exit  
Risk Management  
On-Site Rescue

### TECHNICAL SOLUTIONS

Ferno Arachnipod Bridge System  
Skylotec Actsafe Powered Ascender

### SPECIALIST SKILLS

Industrial Rope Access  
Rescue & Recovery

### KEY RESULTS

- ✓ Inspection completed safely
- ✓ Condition of pipe and valve assessed



## TECHNICAL SOLUTIONS

### Ferno Arachnipod Bridge System

This artificial high directional system is ideal for rescue. Its modular and versatile design means it can be configured and adapted to suit a variety of sites and applications. Perfect for our difficult access location and confined space environment.

### Skylotec Actsafe Powered Ascender

With 200kg lifting capacity, this portable powered ascender does the heavy lifting — perfect for a solo operation. Speeds can also be adjusted — which makes for a controlled descent and ascent. Plus it comes with a long-lasting, strong battery — ideal for big descents.



## SPECIALIST SKILLS

### Industrial Rope Access

Using the above, our rope & rescue team designed a bespoke system — allowing us to:

- Provide the diver with a safe means of access and exit
- Lower the diver safely down into the pipe network
- Raise the diver safely back onto dry land once done
- Maintain physical contact with the diver at all times

### Rescue & Recovery

The addition of a helmet-mounted camera and audio provided a continuous line of communication between the diver and our rope & rescue team — enabling us to:

- Monitor the safety of the diver at all stages
- Identify and mitigate any hazards along the way
- Get real time feedback from his site inspection
- Initiate an emergency extraction of the diver (if required)

## VALUE ADDED

Providing the diver with safe and controlled access to the inspection site allowed him to focus on the job at hand. Once at the site, he was able to perform both a visual and tactile inspection of the pipe and valve as required.

And because of our video and audio feed, site engineers above-ground were able to view what the diver was inspecting in real time. This enabled them to make an immediate but informed assessment on the condition of their infrastructure and any repairs required.