

## High humidity dent repairs

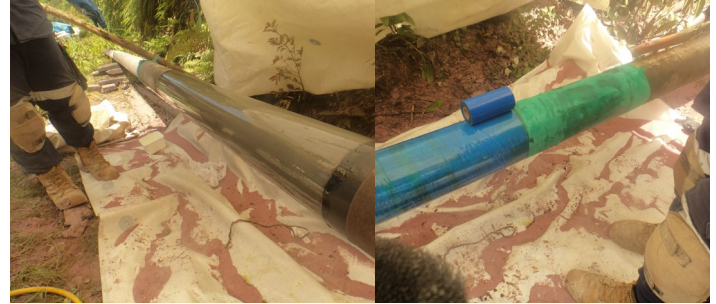
### Overview

Due to wide spread rock falls, an operator had various pipelines with dent damage. Across diameters ranging from NB 600mm to 50mm The structural and pressure containing serviceability of these lines required reinstating. Additionally the location had humidity over 90% and regular rain.

### Scope

The repairs had the following specifications:

<b>Design Pressure</b>	15,300kPa
<b>Diameter (NB)</b>	50mm - 600mm
<b>Surface Preparation</b>	Sa2.5
<b>Installation</b>	Remote access, humidity over 90%
<b>Design Temperature</b>	66°C
<b>Design Life</b>	10 years
<b>Defect Type</b>	Dent
<b>Defect Size</b>	50mm - 500mm
<b>Geometry</b>	Straight and elbow
<b>Crew Size</b>	2



Profiling and consolidation

### Solution

- Technowrap subsea system was used so that humidity and rain did not delay the installation
- Works completed live without hot work
- 2k, glass fibre, was used to enable existing inspection systems to continue being used
- Designs updated immediately with information fed back from site during installation
- Supported by third party testing to verify design methodology

### Benefits

- Rapid response engineering from local office
- Inspection options fully retained and inspection options for Technowrap and underlying steel
- Long term solution
- A crew of two supervisors (ISO24817 compliant) allowed for multiple scope locations to be performed at once



Repair locations



Completed repairs