

CATHODIC PROTECTION SUBSEASURVEY



(i) PROJECT INFORMATION

Date: December 2023 - April 2024

Location: Búzios field, Santos Basin, in the State of Rio de Janeiro, Brazil.



DEFINITION

In the ever-evolving landscape of infrastructure management, ensuring the integrity and longevity of critical assets is paramount. Cathodic protection surveys play a pivotal role in this endeavour, serving as a vital tool to assess, diagnose and address corrosion threats.



SCOPE OF WORK

An offshore engineering and drilling contractor engaged Stork to perform a comprehensive as-laid Cathodic Protection (CP) survey of various subsea assets including risers, export pipelines, pipeline end termination's (PLET's), anode sleds and jumpers.

The project was undertaken across multiple deployments on board a multi purpose offshore vessel and pipelayer vessel in the ultra-deep waters of the Búzios field, Santos Basin with water depths varying between 1537 and 2190m.



Stork personnel installing a CP probe mounted onto a ROV's multi-functional arm.



STORK'S SOLUTION

With an excess of over 70,000 km of pipelines and thousands of structures surveyed globally Stork's team have a wealth of real world experience and are fully competent to undertake all cathodic protection survey requirements.

A challenging aspect of this project was simultaneous operations (SIMOPS), which involves two or more work activities being conducted within the same location, at the same time.

During as-laid operations there were only small windows of opportunity for our experts to undertake the CP survey activities. Stork's personnel on board having experience with as-laid survey operations understood the vessel priorities and were fully flexible to the dynamic operations, which enabled the work to be undertaken effectively, while minimising any impact on other ongoing operations.

The survey activities were undertaken utilising Stork's highly robust and reliable Subsea CP Survey System (SubCAPSS) which allowed for:

- Continuous measurement of CP potential, field gradient and current density
- Anode current output and remaining life calculations
- Acquisition of temperature and resistivity data to enhance reliability of results and accuracy of analysis



RESULTS & BENEFITS

- No recordable injuries
- · The project was finished on schedule and within budget
- · Stork continuously invests in the development of our technology. For example, while on this project, the majority of field based traditional/paper reporting was replaced by online real-time reports. This assisted towards the overall project carbon footprint reduction

As a leading provider of cathodic protection solutions with over 40 years of experience, we support our clients with all of their corrosion prevention needs including design, installation, commissioning and continuous monitoring.



For more information, visit stork.com/uk.