

# CAISSON INSPECTION & COMPOSITE REPAIR

## Workscope

Stork was initially contracted by an Operator to undertake caisson inspection and cleaning services for one caisson on a platform in the SNS. The scope was completed successfully with no requirement for further repairs, so the client asked Stork to carry out the same services on a second caisson.

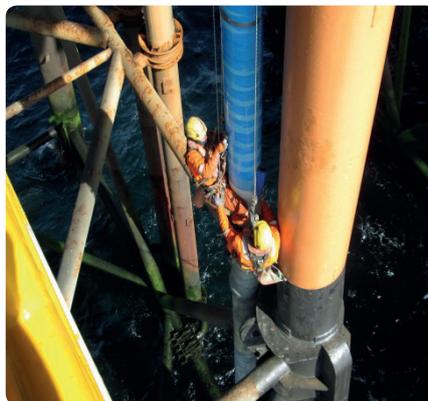
This time, the inspection revealed that the caisson was in poor condition, identifying 10 through hole defects and large areas of deep external pitting at up to 10mm deep.

As a result, Stork was then contracted to devise a solution to reinstate structural strength and integrity of the caisson.

## Solution

Stork designed a Composite Repair solution, combining Epoxy Resin, Bio Dur 563 and Gas Pruf primers with the structural qualities of Stork's AquaWrap polymer and field wetted PowerSleeve. This solution delivered an engineered repair with a 20 year life span.

Stork provided a one stop service, carrying out all calculations and design in line with ISO 24817 and PCC2. Furthermore, the repair was successfully implemented by Stork's dedicated multi-disciplined rope access teams.



## Project Information

### When

- March 2015

### Timeframe:

- 14 Days

### Location:

- Offshore Installation, Southern North Sea

### Workscope:

- Rope access deployed caisson repair

### Installation:

- Innovative composite repair solution using Stork PowerSleeve and AquaWrap technologies

### Materials:

- Epoxy Resin, Bio Dur 563 & Gas Pruf primers and field wetted PowerSleeve and AquaWrap composite systems

### Safety:

- Project delivered safely without an LTI

## Results & Benefits

Stork was asked to undertake this caisson cleaning, inspection and repair workscope following the successful completion of an initial caisson inspection and dropped object retrieval scope for client.

The composite repair solution that Stork devised was a cost and time effective alternative to a mechanical clamp or swaging repair.

Stork's team were flexible, undertaking the repair within the parameters set by the client.

The project was completed safely, on time and on budget.

*"Whilst offshore, we requested Stork clean and survey another redundant caisson on the same platform. Identifying a number of through wall defects and areas of thinning above the water line, Stork proposed a cost effective, external wrap solution. This was safely and successfully executed by rope access giving the caisson a design life of a further 20 years in a new service."*

**Project Manager, Operator**

## Project Information

### Primary Workscope

- Stork was initially contracted to provide caisson inspection and dropped object retrieval. This was completed successfully and without an LTI

### Overall Project Benefits

- Client has an accurate picture of caisson integrity and remedial works have been completed
- Stork provided a cost-effective and long-term solution
- Both projects were completed within the time frame set.