

FPSO Sendje Ceiba

2005 - 2017

Project Type	Structural Reinstatement
Area	7 campaigns between 2005 & 2017
Location	On-station, offshore Equatorial Guinea
Owner	Bergesen/Amerada Hess
Class	DNV



Summary

SPS Technology has had an on-going relationship with this offshore asset spanning 15 years. First in 2005 when SPS was used to reinstate 1m² of the bottom shell in the oil cargo tank No 5c using a Cold Work installation method, whilst the unit remained on-station and in full operation in Equatorial Guinea.

The use of SPS has continued:

- March 2011 - SPS reinstatement of bottom shell in way of suction bell mouth in the WB tanks - 3m²
- March 2012 - SPS reinstatement of bottom shell - 5m²
- August 2012 - SPS reinstatement of bottom shell - 3m²
- August 2014 - SPS reinstatement of the transverse bulkhead - 3m²
- January 2015 - SPS reinstatement of main deck in way of accommodation block above engine room - 15m²
- February 2017 - SPS reinstatement of bottom shell I COT 5P - 1m²
- June 2017 - SPS reinstatement of bottom shell in way of pump room - 22m²

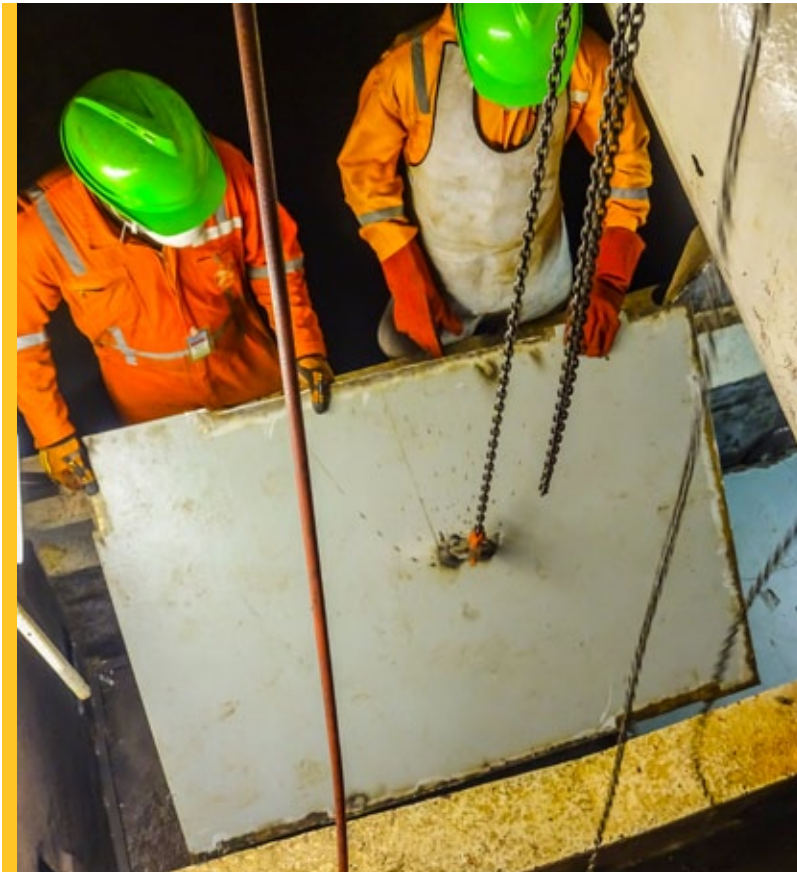
Background

SPS provides the opportunity for operators to undertake repairs on-station with no impact on production and day-to-day operation. Parts are prefabricated on-shore in advance to cut project duration, POB (Personnel on Board), optimise repair quality and, most importantly, overall budget. SPS removes the need for cofferdams and dive boats, scaffolding and all costs associated with crop and renewal.

Details

The Cold Work SPS process uses structural adhesive and bolts for fitting new steel components in place. The bolted connections transfer the full structural capacity across the joints. Once the SPS installation is complete, the composite panel, created through bonding the solid elastomer core to the top and bottom face plates, has strength in excess of the original plating. There is no upper limit on the size of an SPS Cold Work repair - the largest approved by ABS was in excess of 800m².

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SPS Product Specification

Fast

Short repair schedules

Non-disruptive

Minimal labour, no or reduced downtime

Economic

Reduced repair costs, lower operating costs and increased revenue

SPS

SPS uses existing corroded or worn plating as one side of a steel composite panel formed by a new top plate and an elastomer core. The resulting composite fully restores or enhances the strength of the original structure. SPS is approved by all major Classification Societies.

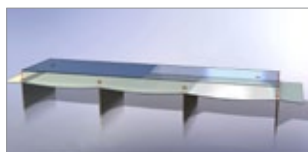
SPS Installation Process

1 PREPARE existing surface



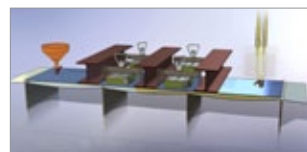
Grit blast and clean

2 CREATE cavities



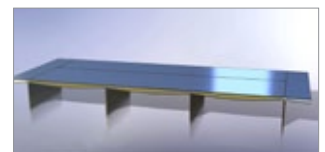
Fit perimeter bars and new top plate to form an airtight cavity

3 INJECT elastomer core



Temporary restraint beams positioned and cavities filled

4 REPAIR complete



New, flat, impact and vibration resistant surface