

# Mechanical handling engineering for gas cooler unit replacement

**ASSET** Floating Production, Storage and Offloading (FPSO) unit  
**LOCATION** Angola

Skidding and mechanical handling systems are often the only option when critical equipment that needs to be replaced is located in an inaccessible area

## BENEFITS

Bespoke equipment to enable the initial removal of inaccessible critical equipment

One system for the on deck replacement for four gas coolers

Expert advice to ensure a fit-for-purpose system was delivered



## CHALLENGE

When back deck space is limited, skidding and mechanical handling systems are often the only option when you have a heavy piece of critical equipment, located in an inaccessible area, that needs to be removed and/or installed.

To facilitate the safe and efficient replacement of four gas cooler units on their FPSO, our client contracted us to conduct a Front End Engineering Design (FEED) study and supply a purpose built skidding and mechanical handling system.

## SOLUTION

- We supplied our client with an efficient skidding and mechanical handling system which facilitated the accessibility of four gas coolers weighing 19 Te and 26 Te.
- We provided all plans, procedures, personnel and rental equipment to support the execution of the project
- Equipment provided included Hydraulic Power Units (HPUs), hydraulic jacking and skidding system, heavy duty tirsors.
- A single skid track was designed which could be adapted to carry a different skid frame to suit each gas cooler
- The design was for a bolted system as no hot work could be carried out on the vessel

## SUMMARY

- Design services
- Design engineering elements
- Onshore testing
- Offshore implementation
- Offshore personnel
- Project management

1.



2.



3.



1. Back deck on which skidding platform was used
2. Sparrows Group staff guide a cooler unit into place
3. One of the new cooler units on deck

Please visit [www.sparrowsgroup.com/contact](http://www.sparrowsgroup.com/contact) to find your nearest office

