

The image shows a massive steel offshore platform being towed by a tugboat across a body of water. The platform's complex lattice structure is visible in the upper left. A thick white tow rope extends from the tugboat, which is seen from behind in the lower right, towards the platform. The water is a deep blue-green with white foam from the tugboat's wake.

**aggreko**

# Keeping new platform in ship shape during mammoth voyage

## CUSTOMER

International Oil Company

## LOCATION

Ulsan, South Korea to North Sea, Norway

## SECTOR

Oil and Gas

## SEGMENT

Upstream offshore

## APPLICATION

Commissioning Power and TC for tow-out to offshore position from construction yard

## KEY FACTS

**500 miles**

Nautical journey

**70,000 tonnes**

Platform

**339 meters**

Platform height

**1 MW**

Commissioning power

**2 500 kVA**

Power generators

**3**

Portable AC Units



THE CHALLENGE

Expert support to lower the heat and control moisture on board

Our customer had finished construction of their large-scale offshore oil rig. From plan to the last screw, it had been built by their dedicated engineers at a construction yard in Ulsan, South Korea.

Needless to say, construction is just one part of a large undertaking when it comes to offshore platforms. The next step would be an even bigger requirement in every sense of the word.

The platform was going to be deployed in the North Sea – which

would involve towing the platform 500 nautical miles across the world and is the biggest platform to have been towed to the UK North Sea Continental shelf for 23 years.

The logistics of such a move would be expertly handled by our customer as they were well versed in such a task. But ensuring the platform was in tip-top shape by the time it arrived at its new home?

Without the necessary dehumidification equipment and expertise onboard to carefully

maintain the core electrical and battery rooms, the months spent out at sea risked the asset being damaged by moisture, so they needed to find a solution to ensure the platform was delivered in immaculate condition to the customer.

THE SOLUTION

Expert cooling and team to lower the heat on board

We had worked with our customer over several projects previously, so they knew we had the experience and expertise to help ensure their project was protected. We had also provided power for quayside commissioning for the low-voltage switch gear of the topside module and other ancillary equipment for around 12 months prior to the transportation of the platform.

The task could be broken into two parts. Firstly, the inside temperature on board was around 40°C, so the customer needed a reliable cooling solution to cool the equipment and accommodation areas on the platform during the four month sail away phase.

Secondly, with humidity estimated at around 60% which would

potentially degrade the core electrical rooms, a dehumidification solution that could keep the moisture at bay was also going to be needed.

Our experts got straight to work, collaborating closely with the customer’s process team on design and providing them technical air temperature calculations and equipment specifications to devise a comprehensive package together. Three AC100 air conditioning units, coupled with a boost fan and one of our trusty 500 kVA generators would lower the temperature from a balmy 37°C to a more manageable environment. The adaptability of our equipment was there for all to see, as our AC100 units cooled at an air circulation rate of 2.5x and 20,000m3/h, while simultaneously

removing moisture that came from the cooling process.

This approach would also lower the humidity on board, so the platform could remain in excellent shape as it made its way across the world. Keeping this below 60% - especially when in Southeast Asia where the humidity is often around 80% - was a challenge that we met head on with diligence and success.

The real star of our solution was the team we deployed to set up the cooling. Two of our installation supervisors and a local team to deploy the ducting allowed for a hitch-free and rapid installation.







## THE AGGREKO DIFFERENCE

# Keeping your platform ship-shape

### THE IMPACT

## Costs cut, time saved and platform arrives moisture-free

The biggest advantage for the customer in this instance was Aggreko's global network. It ensured that logistics were quick and cost effective, as we deployed fleet from Singapore that could be accepted back into our Norway depot with no return cost for the customer. It also meant the customer had dedicated technical and engineering support from the nearest depot, ideal for risk mitigation and any unforeseen emergencies that could unexpectedly crop up. When coupled with our sector knowledge, it really helped move this project.

A few factors really highlighted the benefits of partnering with

us. Things like the air blow from weather deck (HVAC installed location) was not accommodated by normal ducts due to the enormous distance, so we needed to a stainless steel fixed duct for 150m and install permanent scaled blow fans.

We also offered our Central Air Control and Delivery unit (mounted both condenser and compressor into one enveloped 10ft container) which was not able to be provided by local competitors at that time.

And we also harnessed our expertise to train and employ a local workforce to install the ducting too, boosting the local economy and

cutting down on further need for logistics.

The impact of our all-encompassing approach meant that the platform arrived fresh out of the box in the North Sea and on schedule. We also cut the commissioning and Hook-up phases of this project by around 8-12 weeks, as well as the need to run a main turbine or emergency diesel generators to activate a permanent HVAC system.