

TRIDENT MARITIME USES DEHUMIDIFICATION TO PRESERVE OIL RIG ACCOMMODATION



Specialists in shipbuilding sector, [Trident Maritime's](#) century of experience and reputation made it a natural choice for one North Sea platform which wanted to improve its offshore HVAC system.

Planning to reduce the number of personnel required to endure the North Sea chills, Trident planned to adopt a 3 weeks on, 3 weeks unmanned rota on the platform. With no direct oversight for 3 weeks at a time Trident needed a reliable system that could be monitored remotely and run consistently in challenging conditions.

Controlling humidity in this environment was vital to preserving the accommodation for the personnel. As certain assets were initially installed over 30 years ago efficient and effective preservation was paramount. As an existing supplier of Nepronic resistive humidifiers for other offshore applications, Humidity Solutions was a natural choice to partner with.

ROBUST DEHUMIDIFICATION FOR YEAR-ROUND OFFSHORE CLIMATE CONTROL

Offshore applications present fresh challenges for humidity control. Without adequate dehumidification measures the increased water load of air drawn into the premises through HVAC systems can cause mould and corrosion of equipment, a disastrous situation for hard-to-access facility that depends on around the clock operation.

After reviewing the existing platform and HVAC system layouts, capacities, area volumes, heat losses and heat gains, Humidity Solutions specialist presented different solutions considering the company's desire for an energy conscious and reduced noise solution. Other factors influencing suggestions was to ensure even dehumidification through the facility and that all areas would benefit from the target air parameters, as well as varying outside conditions dependant on the season. Trident was advised to have a dehumidifier on each level, but keep all levels open in the unlikely event of any of the units shutting down. The most effective and efficient unit that suited the design parameters of the project was the [Cotes C65](#).

24/7 FULL SYSTEM REMOTE MONITORING POSSIBLE FROM THE SHORE

In addition to the correct selection of units, Trident had peace of mind with full remote monitoring and control of unit operation and internal air parameters. The selected dehumidifier units could be operated using different programs (On/Off, Energy+, Quiet, Custom and Specific Humidity). All fans are 100% controllable, which made installation fast and simple, while reducing noise and keeping energy consumption to a minimum. 24/7 remote monitoring and control allows Trident Maritime to react quickly to any unexpected changes or unpredicted weather patterns.

As a result of the project, Olga Filon, Senior Project Engineer and Trident, believes this Tartan decommissioning scope with accommodation module preservation is first such project in the North Sea.

“ This was our first time working with Humidity Solutions, and through the process of initial enquiry, selection and purchase, there was great comfort knowing that any of our concerns were reviewed, advised, discussed and agreed accordingly with the Humidity Solutions team. The feedback to date from our client has been very positive, which has now opened up further dialog with potential requirements for more de-humidifier units on other assets around the North Sea.

- Olga Filon,
Senior Project Director,

OVERVIEW



Offshore
Accommodation



12°C/30%RH,
28°C/30%RH



7, 130m³

BENEFITS

- + **4 floors** floors of close climate control
- + **24/7** operation with remote monitoring and control.
- + **3 weeks** of autonomous operation.