

CASE STUDY

CLIENT : Seaking Electrical

LOCATION : Birkenhead, UK

REQUIREMENT : 1x 20ft 6MVA Loadbanks
 2x 2.9MVA Transformers

RFA DILIGENCE GETS 4.5MVA LOADBANK SOLUTION AS PART OF £16m REFURBISHMENT PLAN



RFA DILIGENCE (A132), the Royal Navy's premier repair vessel, which has seen active operations throughout the Falklands and Gulf wars, is undergoing a £16m refurbishment plan, of which Crestchic Limited, the fast growing loadbank specialist, has successfully provisioned a 4.5MVA loadbank test on the vessel's 2.52Mw Wärtsilä generators.

The load requirement saw Crestchic transport a 20ft 6MVA loadbank and two 2.9MVA Transformers operating a 6Kv 60Hz, 3-phase system to the Birkenhead dockyard, where the vessel currently resides while it undergoes the major refurbishment plan.

One of the key design features of the RFA Diligence is the advanced Dynamic Positioning system. This system uses computer-controlled azimuth and bow thrusters and a variable pitch propeller to allow the RFA Diligence to maintain a selected static position to within a few metres, in bad weather conditions of up to Force Nine.

"The Vessel has a diesel-electric drive; five Nohab-Polar diesel generators; four NEBB motors; one propeller; two 360 degrees azimuth thrusters and two bow thrusters," said John Carr, Special Projects Manager at Crestchic Limited. "We were contracted to supply loadbank equipment for the testing of the vessel's generators."

"Prior to the start of the two week testing schedule, we installed both low and medium voltage cabling and ensured the loadbanks achieved a resistive and resistive reactive capability at 0.8PF and stepped load increments up and down 1kW/1kVA, allowing for the incredibly accurate application and rejection of load.

"The Diligence has seen some heavy use over the last 25-years, being used as a support ship for submarines in the Far East and has had the longest deployment of any RFA ship in recent times, which makes our job even more crucial to the continued success of the vessel."

Crestchic is a dedicated manufacturer and retail supplier of loadbank packages, which are available from 30Kw to 100MVA. Boasting high profile clients from every corner of the globe, Crestchic is leading the way in loadbank solutions for the power generation, oil and marine sectors.

"We also had an engineer on site to install, operate and monitor the loadbank tests," continued Carr.

Operating from multiple bases in the UK, Europe, US and the Far East, the company has garnered an excellent reputation for its high levels of quality and service.

