

ROYSTON COMPLETES ENGINE OVERHAUL WORK ON ONE OF WORLD'S MOST ADVANCED OFFSHORE SUPPORT VESSELS



Work on overhauling diesel engines on one of the most advanced diving support vessels in the world, has been completed by power specialist Royston.

Engineers undertook the 30,000 running hour major service on the generator engines onboard the 140m long Subsea 7 *Seven Atlantic*, as part of a comprehensive refurbishment and maintenance programme of critical power plant.

The 2009-built *Seven Atlantic* is one of the largest and most capable vessels of its type in the world. It operates a 24-person saturation diving system.

The work by Royston saw the Wartsila W7L32 diesel generator No.5 disassembled to install new cylinder heads, air start valves, indicator cocks, injectors, and cylinder seals. Relief valves, pistons and conrods, cylinder liners, bearing blocks, crankshaft and turbocharger were all sent to company's Newcastle work shop for checking and essential repair work before being returned ahead of the final reassembly and inspection of the engine. Engineers also overhauled the turbocharger on the Wartsila W7L32 diesel generator No.3.

Requiring 12,000 running hour overhaul, the NA297 Napier turbochargers from both engines were removed, stripped, cleaned, inspected and balanced at Royston's specialist test and repair facility, which features a Schenk H3BU horizontal balance machine alongside an IRD B5OU-290 instrument as part of a precision instrumentation capability to increase balance testing.

Following completion of the servicing work, incremental load testing in line with the engine manufacturer's specification was also completed by engineers.

Shawn Doering, Royston's service manager on the contract, said: "Our experience with the engine and vessel type ensured the work was carried out efficiently and effectively, enabling the vessel to return to sea-going operations as quickly as possible.

"Vessel operators can save upwards of 30% when using service providers like Royston without compromising the quality and standard of engineering work provided."

Seven Atlantic's power plant package comprises six Wartsila 7L engines, each driving a 3360kVA Van Kaick generator, generating 6,6 kV (mains voltage). The propulsion installation runs on marine gasoil to provide power for propulsion, dive systems, crane activities and other consumers.