Eastney Pumping Station

Robust reliable engines

Southern Water’s Eastney Pumping Station is situated in Portsmouth, a city of over 200,000 people on the south coast of England.

Two James Watt engines, each of 300 horsepower, powered the original Victorian facility but in the 1960s, as the station was no longer large enough to cope with the increase in demand due to the rise in the local population, additional power was required.

Among the equipment selected for the upgrade were six Allen S12 diesel engines – two in-line 6BCS12-C engines and four vee 12VBCS12-C engines.

The diesel engines were selected to drive the storm water pumps. This avoided the high maximum demand charges for electricity, which would have been incurred by the use of motor driven pumps, and utilised a different energy source.

Most of the auxiliaries essential to the operation of the engines are motor driven or electronically controlled, and it has, therefore, been arranged for all the plant to shut down automatically should the mains supply fail. A separate stand-by diesel alternator set is then brought into operation and the diesel driven storm water pumps and auxiliaries can be restarted.

The Allen S12 engines at Eastney Pumping Station were installed in 1966. These engines have established a strong and deserved reputation for robust reliability and economy in a variety of applications using a variety of fuels. The pumping station continues to be predominantly used for pumping storm water out to sea at appropriate tidal conditions.

During their operation these engines have proved their durability when they were completely submerged by storm water in 2000. Southern Water requested the major overhaul of all engines in order that they can provide a further 25 years service to the people of Portsmouth, by which time they will have been in service for well over 60 years.

The work involved a complete and comprehensive overhaul of the engines, replacement of spare parts where necessary, inspection and recommissioning of the engines. Recommissioning included bearing trials, operation of all on-engine protection and overspeed trips, running in and performance tests.
Reliability and durability

Allen Diesels’ engines are designed to provide customers with the best value for their investment. Considerably more than half of Allen diesel engines installed in the 1960s are still fully operational today in a wide variety of locations and applications.

These engines include pumping sets on oil pipelines in India – many with well over 200,000 operating hours, a significant amount of engines for numerous marine vessels including tankers and ferries, and base load engines for various power stations.

Many of these engines operate in some of the most hostile and challenging environments, from Zambia to remote parts of India and from China to Mexico, as well as many engines closer to home.

As you would expect we are able to fully support all of our active engines with dedicated spares teams who provide a prompt and efficient response to enquiries. A full range of genuine new parts is available – spare parts supply can range from individual parts to interval maintenance packages and recommended contingency spares lists tailored to meet individual customers’ requirements.

Our team of highly skilled, specialist field service engineers are available to travel to support customers on a round the clock, round the world, basis and can be mobilised at extremely short notice.

Experts on the entire Allen Diesels range of engines support a full breakdown service, fault diagnostics and trouble shooting. Planned and unplanned maintenance schedules in conjunction with our spares department are also available. Competitive rates for engineers of all disciplines are available on request.