

ELECTRO MECHANICAL INNOVATION IN

Marine





ELECTRO MECHANICAL INNOVATION IN

Marine

Houghton International improves the performance of electro mechanical assets around the world. We use our technical expertise to work with customers to solve their problems offering a high-quality monitoring, maintenance, repair and life extension service for motors, generators, pumps and all electrical rotating equipment.

At sea, in dock or in our workshop, we work with ship engineers, vessel operators and dry docks in the North Sea and beyond providing monitoring, planned maintenance and emergency repairs to a range of marine equipment.

More than a standard overhaul, as standard...

Specialising in the monitoring, maintenance and repair of electro mechanical equipment, our multi discipline service offering includes winch motors, full thruster assemblies and other propulsion equipment.

Our multi skilled site services team is fully qualified and experienced in working in enclosed spaces and difficult access environments. We carry out a range of in situ services from inspection and testing and simple overhauls to full rewinds and performance upgrades. Travelling to the vessel in dock or sailing with the ship, we also support vessel engineers in the removal and recommissioning of equipment and carry out condition monitoring, in person or remotely, to assess the condition of the assets and minimise any unplanned failures.

Houghton International is strategically located near the River Tyne enabling our engineers to mobilise quickly and efficiently as required to provide a high quality repair in the shortest possible timescale.

Working on vessels at sea, when they are docked or on equipment in our workshop, we adhere to industry best practice and provide a fast and efficient service in line with customer requirements. We operate a 24/7 call out system and emergency repair service to ensure any downtime is minimised and return on investment is maximised.

Undergoing a range of static and dynamic tests, all equipment is thoroughly tested prior to recommissioning to ensure minimum disruption and verify the repair. Full load testing can also be arranged for critical machines to provide additional assurance.

Get in touch to find out more about how we mobilise specialist engineers within hours to keep vessels moving and assets optimised.





Our services



Electric Motors

Our electric motor repair and motor rewind services cover a wide range of AC and DC electric motors, including random wound stators and armatures, and non-standard soft coil and preformed high voltage coils for a range of applications.

From standard to more specialist motors, we have experience in the repair, overhaul and life extension of industrial electric motors, including hazardous area equipment (Ex), both in our workshop and in situ, up to 50MW and 40 tonne.



Generators

We offer mechanical and electrical repairs to a broad range of generators including induction generators, slip ring generators, synchronous - salient pole generators, steam or combustion turbines and generators for industrial application, up to 50MW or 100MW for turbo-alternators.

Our site services include, inspection, testing and fault diagnostics including air gap checks and partial discharge testing, equipment removal and generator installation and commissioning.



Pumps

We have a team of experts in pump repair and maintenance to help extend the life of pumps and associated ancillaries for industrial use.

Our engineers excel on complex projects where obsolescence is an issue and can reverse engineer failing pump parts, restoring and often improving the performance of aged machines to increase efficiency and reduce running costs. All pumps are fully tested, providing performance analysis and pump curves as required for added assurance.



High Voltage Coils

Manufactured in house, we offer a range of resin rich and global VPI insulation systems for industrial, power generation and specialist applications. With absolute control over quality, we manufacture stator, armature, field and rotor coils for all types of motors and generators up to 15kV, in diamond and concentric designs.



24 Hour Emergency Repair

We operate a 24 hour call out 365 days of the year and offer an emergency repair service, with engineers working around the clock to restore functionality of critical motors.

We understand time is money for our customers and we work alongside them to solve their problems, efficiently and effectively in the shortest timescale possible.



Gearboxes

Utilising a comprehensive range of in house machining facilities, our mechanical fitters provide maintenance, repair and refurbishment services for gearboxes and associated equipment. From fault diagnostics to the removal, reconditioning and refitting of the complete power transmission system. We overhaul and upgrade all types of industrial gearboxes including bearing and seal replacement and the manufacture of new shafts and gears.



Electro Mechanical Site Services

Our engineers carry out on-site essential maintenance services including brush and bearing changes, motor replacement, mechanical and electrical installation work, laser alignment, dynamic balancing and condition monitoring to support our customers maintenance requirements.



Other Electrical and Mechanical Services

Making use of our fully equipped machine shop, 3D CAD and design capabilities, range of specialist equipment and highly skilled staff, we support industrial and manufacturing engineers by offering reverse engineering of obsolete parts, tool making, dynamic balancing, VPI and welding.



Working with Houghton International

We work collaboratively with customers in the marine industries to improve performance and reliability by solving complex engineering problems and extending the life of electro mechanical assets on the vessel.

As specialists, we have invested in industry-leading technologies and patented solutions to eliminate failures, improve reliability, increase lifespans, and significantly reduce cost and frequency of unplanned maintenance activities.

Innovation drives our business and we are committed to continuous improvement both to internal processes and customer service. We aim to solve our customers problems and add value through innovation.

Quality Assurance

Houghton International operates in sectors where quality procedures and the safety of equipment are critical. As such, we have developed a rigorous quality policy with processes and procedures to ensure that everything we do is of the highest standard.

These policies and procedures are reviewed across all areas of our business on an on-going basis, which reflects our culture of continuous improvement. We continuously invest in our plants and machinery and the training of our staff to guarantee a high-quality process.

Contact us on +44 (0)191 234 3000 to find out more or visit www.houghton-international.com













Houghton International

Ronnie Mitten Works, Shields Road, Newcastle upon Tyne, NE6 2YL, United Kingdom.

T: +44 (0)191 234 3000

E: info@houghton-international.com **W:** www.houghton-international.com

