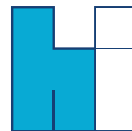




ELECTRO MECHANICAL INNOVATION IN

Water



Houghton International
Electro mechanical innovation



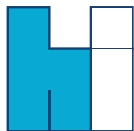
Houghton International

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Houghton International
Electro mechanical innovation

Water

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.

Supporting the water and wastewater industry throughout the UK, we specialise in the monitoring, maintenance and life extension of critical assets including pumps and motors in pumping stations, distribution networks and treatment plants.

More than a standard overhaul, as standard...

Houghton International works with water companies across the UK to maintain their rotating assets and improve the performance and efficiency of their water networks.

From standard overhaul of a peps or blower motor to a full rewind and restoration of a large borehole pump and motor system, our diverse range of operations, across all OEMs, enables customers to engage one supplier to service their full array of equipment benefiting from improved efficiency and increased cost control. Ongoing condition monitoring and vibration analysis is also provided to help plan maintenance activity and reduce any unexpected failures.

With a long history of working in the water industry, we offer a range of services to support maintenance engineers in this field. Our site services team is multi-disciplined and work on a range of assets including pumps, motors and gearboxes, providing assistance with removal and reinstallation as well as in situ testing and condition assessment to recommend the best course of action.

Accredited to the latest standards and with one of the largest burn off stoves in the UK, our workshop is fully equipped to service the full spectrum of rotating machines operated in the water industry.

Underpinned by our 24/7 emergency repair service and combined with our in house coil manufacture facilities, large machine capabilities and dynamic motor and pump testing equipment, we are ideally placed to take on special projects, emergency repairs and ongoing maintenance frameworks.

Our engineers excel on complex projects where obsolescence is an issue and can reverse engineer failing pump parts and motor windings, restoring and often improving, the performance of aged machines to increase efficiency and reduce running costs. We can also support the design and implementation of new systems providing specialist advice on how best to achieve system specific outcomes.

Combining our many years of experience with the latest 3D CAD technologies and high-quality processes, we ensure that all work is carried out to the highest standards and fully tested prior to reinstallation, providing performance analysis and pump curves as required for added assurance.

Get in touch to find out more about how we can improve the efficiency of your systems and work together to maximise the ROI of your maintenance investment.

KEY INFORMATION

- Multi service offering covering all electro mechanical assets including full motor and pump systems
- Reverse engineering and obsolescence management capabilities
- Dynamic load testing and performance analysis
- Improved efficiency and life cycle costs
- Fully equipped, large machine repair facility
- Site services - installation and removal, in situ testing and condition monitoring



**Houghton
International**
PUMP TEST SCHEMATIC

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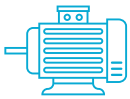
Our services



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.

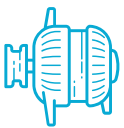
Our engineers excel on complex projects where obsolescence is an issue and can reverse engineer failing pump parts, restoring and often improving the performance of aged machines to increase efficiency and reduce running costs. All pumps are fully tested, providing performance analysis and pump curves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



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.



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 water industry to improve performance and reliability by solving complex engineering problems and extending the life of electro mechanical assets in their facilities.

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



"After rigorous testing, the pump was installed with Houghton International engineers in attendance to assist. The repaired unit was set to work straight away and has operated reliably since, helping provide Tyneside with a reliable source of potable water."

John Fielding

Maintenance Manager, Northumbrian Water.



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