

Specialist HVAC & Refrigeration Services

For the oil & gas, marine and renewables industries





Our Johnson Controls

We provide a complete life safety & asset integrity service to the oil and gas industry worldwide. Protecting life, assets and the environment for more than 120 years.

Johnson Controls, who are behind some of the best known brands in the industry including Tyco offer a portfolio of products and services that provide robust solutions to your safety needs.

With experience that can be traced as far back as 1852 and one of the world's largest portfolios of fire, safety and asset integrity solutions, Johnson Controls is a leader in meeting safety and security challenges for the oil & gas market.

We are passionately committed to helping customers improve safety and asset integrity. As such Johnson Controls helps

protect 90% of the world's top 50 marine and oil & gas companies for all types of assets and facilities, from fixed platforms, FPSOs, semi-submersible platforms, jack-up drill rigs, drill ships, cargo vessels, oil tankers, platform supply vessels to terminals and refineries, around the world.

With major marine and oil & gas centres of excellence in the UK, Johnson Controls has 50 years' experience in providing safety and asset integrity solutions to the global marine and oil & gas markets.

Full Spectrum safety & asset integrity specialist

- Detection and control
- Portable gas detection
- Interface engineering
- Safety products
- Fire protection systems
- Fire safety maintenance



- Deluge verification
- HVAC / Environmental solutions
- Descaling
- Audio communications
- Fiscal metering
- Wellhead and hydraulic process control
- Security and surveillance

Heritage brands

Oil & Gas HVAC Services is a department within the legacy Tyco Oil, Gas & Marine division, an organisation which focuses on life safety and asset integrity products and services in the hazardous offshore and marine environments. Our HVAC Services department has operated in the North Sea market for over 40 years under the heritage brands Prestaroy, Wormald Engineering, and Tyco Fire & Integrated Solutions.

HVAC & refrigeration maintenance

HVAC & refrigeration maintenance

Johnson Controls undertakes routine preventative HVAC maintenance on a wide variety of oil and gas assets on- and offshore. Being a Life Safety oriented business, we ensure that ventilation which is critical to life safety – for example where associated with temporary refuges, hazardous areas and LEV systems – achieves the highest standard of compliance, reliability and performance.

We understand that something as simple as an overheating switchroom can potentially take an entire process plant offline, costing your company revenue, and therefore our engineers maintain revenue-critical systems such as process ventilation and cooling to the same exacting standards.

And we know that a poor quality of ventilation in occupied areas can have an impact on morale and fatigue levels among your workforce. That's why our engineers work hard to maintain your accommodation HVAC systems in compliance with design and legislative requirements.

Breakdown callouts

Breakdowns of ventilation and refrigeration systems can affect safety compliance, revenue and workforce morale. While Johnson Controls strives to maximise reliability of systems through proactive maintenance, we also retain the flexibility to respond quickly to breakdowns when they do occur.

F-gas servicing & management

With an international maintenance and repair network in place for refrigeration systems of all sizes and complexity, we are well placed to manage your F-gas systems and recording. We can offer routine maintenance, breakdown repairs, troubleshooting, HCFC phaseout, F-gas recording and compliance audits, and we also offer guidance on F-gas legislation updates to all operators. Our organisation is accredited by REFCOM, and all engineers are qualified to current UK standards to work with refrigerants.



Door services

Johnson Controls can arrange maintenance and repair visits using specialist engineers for your external boundary doors offshore. We can also align this service with TR Integrity testing to reduce costs and bed-space requirements offshore.

Reinstatement & recommissioning

When it's time to take a ventilation system, module or even an entire rig out of dormancy ready for use, we can prepare the HVAC for operation. Typical tasks can include:

- Perform maintenance to system components
- Removal of preservation fluids and coatings
- Pressure test, recharge and reinstate refrigerant systems
- Clean, repair and rebalance ventilation ductwork
- Commission and set systems to work
- Assess compliance of systems with performance standards



Oil & gas HVAC specialist services

Temporary refuge integrity (SGI / PFEER testing)



Problem: In the event of a fire or process incident offshore, Temporary Refuges (TRs) form a last line of defence to shelter and protect personnel at muster, by limiting as far as possible the ingress of gas or smoke into the refuge. Integrity is affected over time by degradation of ventilation dampers, door seals, module fabric and utility penetrations, leading to excessive leakage and the TR becoming impaired during an incident.

Solution

Our engineers inspect the TR module and measure its performance using the latest industry-approved techniques and equipment, enabling the standard of integrity to be determined and leakage paths to be identified and repaired.

Local exhaust ventilation

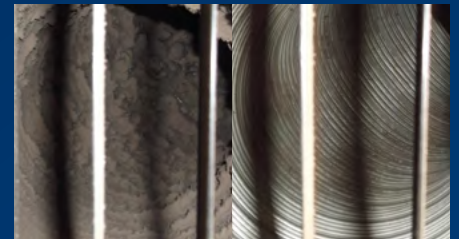


Problem: Every year, thousands of workers in the UK develop asthma and other lifelong respiratory illnesses as a direct result of exposure to harmful dusts, fumes, vapours and gases in the workplace. Local Exhaust Ventilation (LEV) systems are used to control and reduce exposure to these airborne contaminants – such as drilling mud vapours and welding fume – in order to comply with CoSHH Regulations.

Solution

We support your LEV requirements to maintain healthy systems and protect employees. Our LEV engineers – accredited by BOHS – can assess and repair your existing systems, and are also able to design, install and commission new or replacement LEV to comply with current legislation. Where we detect faults or shortcomings our engineers suggest repair strategies to restore operation quickly.

Ductwork cleaning & air quality



Problem: Accumulated grease and lint deposited within galley and laundry extract ductwork are a significant hidden fire risk, which must be inspected and cleaned regularly. Dirty ventilation can cause 'Sick Building Syndrome', a variety of health problems brought about by debris, dust, moulds, spores, and stagnant water present in neglected ductwork. If your employees are experiencing a persistent sore throat, irritated eyes, runny nose or fatigue when offshore, contaminated ductwork could be the culprit.

Solution

We have the experience and the tools to clean all types of ventilation ductwork offshore to a high standard with minimal disruption, restoring ventilation performance and air quality. And we can also offer our ductwork inspection and air quality monitoring services to identify and fix developing air quality issues early on.

Other services

Johnson Controls offers a full suite of additional specialist services relating to oil and gas HVAC:

- HVAC Design Consultancy
- Maintenance Strategy Review
- Noise Abatement & Control
- Defect Investigation & Root Cause Analysis
- Ventilation Balancing
- Air Quality Monitoring
- Performance Standard Compliance
- Equipment Overhaul & Exchange
- Energy Optimisation
- Process Gas Cooling System Overhaul

Products & projects

Johnson Controls offers the oil and gas industry a wide range of solutions for every ventilation and refrigeration need. We work together with our Denmark-based Marine Systems division and numerous third-party suppliers to supply and install parts, complete systems, and manage and contribute to projects.

Some examples of the equipment and systems we provide, and example applications for each, are given below.

Example products

- Split Air Conditioning Systems
- Water / Air Cooled Condensers
- Chilled Water Packages
- Ventilation Fan Packages
- Humidification Equipment
- Fire & Gastight Dampers
- Air Handling Units
- Ventilation Ductwork
- HVAC&R Automation Control

Example applications

- Crane Cab Air Conditioning
- Provisions Room Refrigeration Plant
- Switchroom / Control Room Cooling
- Laundry Extract Ventilation Upgrade
- Accommodation HVAC Upgrade
- Temporary Refuge Boundary Dampers
- Modular Cabin HVAC Build
- Local Exhaust Ventilation System
- Cooling System Control Upgrade

Bespoke design

All of the HVAC and refrigeration systems we design and supply – either through our in-house brands or from third party manufacturers – can be extensively tailored to your application offshore, including the specification of ATEX compliance for units to be installed in hazardous areas.

Installation & commissioning

We frequently undertake projects to manage the procurement, installation and commissioning of ventilation and refrigeration systems on oil, gas and marine assets throughout the world.

In fact, Johnson Controls installed base in the marine sector currently stands at more than 18,000 installations, meaning that over 20% of all the worlds' ocean-going vessels have JCI equipment installed.

JCI brands

As the world's largest HVAC components manufacturer, Johnson Controls has a number of 'in-house' brands producing a diverse inventory of HVAC and refrigeration parts and packaged systems, retailed at highly competitive prices.

HITACHI



YORK
INSTALL CONFIDENCE.

Gram
Refrigeration

Frick
INDUSTRIAL REFRIGERATION

PENN

STAL
REFRIGERATION

We also supply HVAC and refrigeration components and systems from many specialist third party manufacturers, and have excellent trade relationships and discount agreements in place with key suppliers.

Spare parts and consumables

Johnson Controls, together with our multiple industry-leading brands, build thousands of product lines as part of the world's largest HVAC components portfolio. Our position as a major OEM means you can procure directly from the manufacturer faster and at a better price for many common components, while we also retain excellent relationships and trade discounts with many specialist third party suppliers.



Global Strength

Local Expertise. At your service.

Full spectrum of safety and asset integrity solutions

- Fire and gas detection / alarm
- Detection and control
- Fire protection systems
- Fire safety maintenance
- Portable gas detection
- Safety products
- Deluge verification
- Chemical descaling
- Audio communications
- Public address & alarm
- HVAC & Environmental
- Wellhead process control
- Fiscal metering
- Interface engineering
- Security and surveillance

United Kingdom oil and gas locations

Aberdeen

Tel: +44 (0)1224 293 500

Great Yarmouth

Tel: +44 (0)1493 440 500

Manchester

Tel: +44 (0)1614 554 400

Norwich

Tel: +44 (0)1603 201 201

Nottingham

Tel: +44 (0)1159 040 404

International locations

Europe

United Kingdom

Norway

Asia

Seoul, Korea

Busan, Korea

Singapore

China

Middle East

UAE

Kuwait

Oman

South America

Brazil

Africa

For further information on how we can help with your safety & asset integrity requirements please call **0800 389 3195**

www.johnsoncontrols.co.uk

