

HVAC Smart Service Solutions



Proactive and reactive

The power behind **your mission**



Proactive
and reactive





We are there before you need us

Johnson Controls knows it is essential to quickly identify and resolve operational issues before they become a problem. Our cloud-hosted analytical tools cut costs, maximise uptime, and provide targeted maintenance to give you efficient, reliable, and compliant chillers.

We adopt a proactive stance, actively investigating HVAC equipment data so issues can be identified and corrected before they impact on operations.

Our teams are swift to react to problems – but we prefer to not let it get that far.

We monitor HVAC systems and utilise remote troubleshooting and diagnostics to prescribe targeted, timely maintenance and prevent breakdowns happening in the first place.

Prevention is better than cure

Our intelligent Smart Connected Chillers and Condition Based Monitoring services find and fix small issues before they became big problems that hit your productivity and your pocket.

We drive down total life cycle and operational costs with smart maintenance schedules and discreet repair processes.

Maintenance is cheaper than overhauls and repairs – we are proactive first and reactive second.

It's always business as usual with us as we don't interrupt your day-to-day operations.

We have the global expertise and a legacy of innovation excellence stretching back more than a century. Our proactive smart predictive systems and leading HVAC experts ensure your equipment is always online, operational, and efficient.

We are your ultimate long-term HVAC services partner.

Our Solutions

Smart Connected Chillers

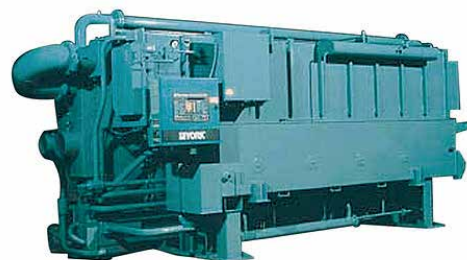
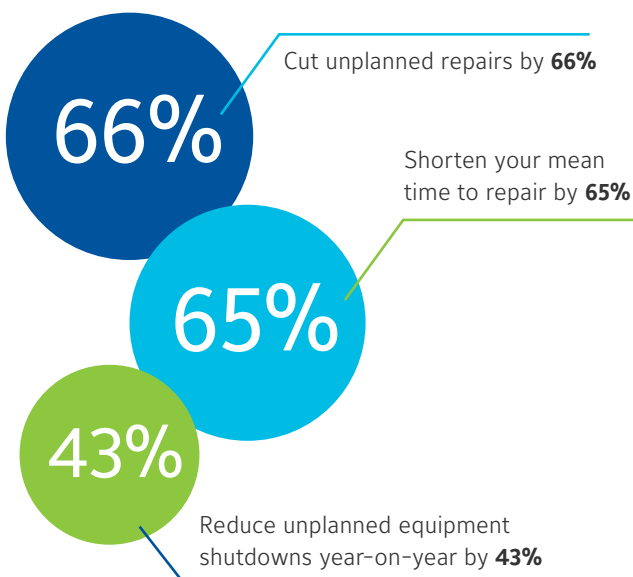


Why guess at how your chiller is doing when you can know?

Smart Connected Chillers (SCC) gives technicians and customers the power to quickly identify, troubleshoot, and resolve chiller operating issues using cloud-hosted analytical tools.

These smart utilities provide a host of benefits, including boosting equipment reliability, safeguarding critical environments, and driving down service and operating costs.

Our data shows you could:



All this adds up to serious savings

Technicians and customers can access real-time operational information using a smartphone, tablet or computer. This trend data gives users the keys to unlock a number of powerful capabilities. They can analyse issues, identify deteriorating conditions, and collaborate to formulate the best response.

Condition Based Monitoring



Condition Based Monitoring (CBM) is a maintenance solution that uses smart analytical tools to boost the efficiency and life cycle of your equipment.

CBM uses vibration monitoring and analysis, infrared thermography, performance/process monitoring, and lubricant/oil monitoring to produce rich analytical data.

This information is uploaded to a cloud-based reporting tool. You and our HVAC experts can use trend data, equipment history, and asset status to produce actionable insights that make maintenance targeted and efficient, not broad and wasteful.

Assessing the data at-a-glance is easy, as the interface displays a simple yet comprehensive traffic light system to provide paperless reporting.



Don't just perform some maintenance - perform the right maintenance to keep your equipment operating optimally.

Rental Services



Are you preparing for process seasonality, planned shutdowns, emergencies, special events or field projects?

Or perhaps you simply want to keep your options open and avoid sinking operational funds into bought equipment?

Our tailored Rental Solutions experts are here to support your business goals, whatever they might be.

You can get all the benefits of critical, world-class equipment operating at its peak without any focus being drawn from your core business activities. You will not have to make sizeable initial investments or take on the life cycle costs associated with some permanent HVAC applications either.

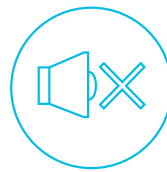
Our Rental Solutions are engineered to suit your precise requirements.



Why HVAC Smart Solutions?



Drive down operational costs by troubleshooting small issues before they become big expensive problems.



Cut down noise and transmitted vibrations, reducing sound pollution, and wear and tear.



Boost equipment reliability and extend the operational life of your equipment.



Smart monitoring of your machinery drastically reduces the risk of oil, coolant or refrigerant leaks.



Maximise equipment uptime and ensure all components and operations are fully compliant.



Monitor optimum lubrication, which reduces energy consumption, cutting costs and benefiting the environment.



We deliver service excellence through our directly employed in-house service technicians - diagnose the correct maintenance at the right time to save time and money.



Maintain safe margins of operation, avoiding dangerous situations and promoting health and safety.



One-on-one consulting means our HVAC experts are familiar with your setup and can give your equipment the dedicated focus it deserves.



Sophisticated secure socket layer (SSL) cybersecurity setup ensures your data is always kept safe.



Comfortable occupants are more productive, boosting your bottom line.



With our vast global reach and extensive local networks, no one can match Johnson Controls as a one-stop-shop for all service options.

Case Study



Jaguar Land Rover Warwickshire, United Kingdom

Johnson Controls has advised Jaguar Land Rover on matters relating to the service, maintenance and repair of the HVAC system installed at the Gaydon Centre for almost 20 years.

The team was invited to submit a proposal for replacing the evaporator installed in the Climatic Wind Tunnel.

Our experts drew their attention to the key factors that we believed were behind the evaporator's less-than-optimum performance levels.

- Analysis of performance levels being achieved by the existing plant was carried out, thus allowing us to calculate areas where potential energy savings and cost efficiencies could be achieved.
- All figures calculated during the test phases, and submitted to Jaguar Land Rover to assist them in identifying projected energy savings and cost efficiencies, were ultimately verified.
- To counter the heat transfer fluid issues, we initially carried out tests using glycol before settling on the newly developed environmentally friendly heat transfer fluid Thermera® AC.

Results

1.


The new plant allows for the re-use of existing closed circuit fluid cooler to promote energy savings during high temperature vehicle testing. We predict Jaguar Land Rover will achieve savings in the region of 513,000 kWh per year.

2.

Our technical solutions were delivered with the minimum amount of disruption to Jaguar Land Rover's core operations.

3.

Upon completion of the works, a contract for planned and reactive maintenance was implemented by the service division of Johnson Controls.



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Testimonials

"Johnson Controls adapted well and were agile to the situation, working efficiently and safely. Importantly, the site team was respectful and understanding to the working requirements on site."

"I was very satisfied with the final quality of work, but also how neatly and precisely [Johnson Controls] worked throughout the project. The engineers all showed a high level of knowledge and skill, with a clear understanding of dealing with any issues and problems and resolving them quickly."

"Communication was always good. The site team provided me with updates and identified points of concern if they believed something to be the case. I believe this clear communication was a main reason why we didn't run into any major difficulties during the project. There was always a member of the engineering team who would pick up my calls and emails swiftly to answer any queries that I had."

Project Manager (2019)

"I would like to say the team went above and beyond at all stages of the project delivery for what was a complex project for a demanding client in a challenging environment."

"Rigging cranes in police stations, close to the glide path of arriving aircraft, dealing with huge permit challenges and yet still managing to maintain calmness, and an overarching desire to deliver a great job, were evident throughout."

"There were significant additional requirements and proposals thrown in on an almost hourly basis and every one was dealt with quickly and professionally."

PSA Client (2019)





Who we are

Johnson Controls is a leading pure play buildings business serving a wide range of diverse customers in more than 150 countries. We advance the safety, comfort and intelligence of spaces and places.

Our 100,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure, and next-generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities.

We are the power behind your mission.

Why Johnson Controls?

- Leaders in the world buildings market
- Global reach with local service
- Unbeatable HVAC expertise
- Wide range of technologies and services
- Reliable, innovative products



The engineers are an absolute credit to Johnson Controls and we're really glad we have the opportunity to work with you – long may it continue.

About Johnson Controls

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimizing building performance to improving safety and enhancing comfort, we drive the outcomes that matter most. We deliver our promise in industries such as healthcare, education, data centers, and manufacturing. With a global team of over 100,000 experts in more than 150 countries and over 130 years of innovation experience, we are the power behind our customers' mission. Our leading portfolio of building technology and solutions includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Ruskin®, Titus®, Frick®, PENN®, Sabroe®, Simplex® and Grinnell®.



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