

Chillers

Services for air-cooled, water-cooled, absorption and specialty drive chillers.

DESCRIPTION	SERVICE ASSIST	SERVICE COMPLETE	
	BASIC	BASIC	PREMIUM
	Inspection and maintenance program designed to supplement in-house staff and minimize risk of failure on covered equipment.	Factory recommended inspection and maintenance program designed to minimize repairs and maximize the efficiency and useful life of the covered equipment.	Factory recommended inspection, maintenance and repair program designed for customers who want budget predictability and protection from unplanned failures on covered equipment.
Connected Chiller Technology Package*	Required	Recommended	Recommended
Scheduled Onsite Comprehensive Maintenance (Includes Labor and Service Parts)**	1/year	1/year	1/year
Scheduled Remote Inspections by Branch Technician*	3/year	Optional	Optional
Scheduled Onsite Operational Inspections (Includes Labor and Service Parts)*		3/year	3/year
Prioritized Unscheduled Service	✓	✓	✓
Unscheduled Repair Parts & Labor**			✓
24/5 or 24/7 Extended Service Hours			Optional
After-hours Emergency Call Center	✓	✓	✓
Industry-leading Safety Program	✓	✓	✓
Factory-trained Technicians	✓	✓	✓
Dedicated Customer Service Representatives	✓	✓	✓
Customer Portal - Online Access to Service History and Documentation	Optional	Optional	Optional
AVAILABLE WITH CONNECTED CHILLER TECHNOLOGY PACKAGE			
Connected Chiller Connectivity via Customer Network	✓	✓	✓
Connection via Cellular VPN	Optional	Optional	Optional
24/7 Branch Access to Chiller Status and Trend Data	✓	✓	✓
Chiller Health Analysis and Reporting	✓	✓	✓
Automated Chiller Logs	✓	✓	✓
24/7 Critical Alarm Monitoring by Johnson Controls Remote Operations Center	✓	✓	✓
8/5 Branch Notification of Critical Alarms	✓	✓	✓
24/7 Branch Notification of Critical Alarms	Optional	Optional	✓
Customer Notification of Critical Alarms	Optional	Optional	Optional
Branch/Customer Notification of Customer-Defined Chiller Alerts	Optional	Optional	Optional

* Available on most YORK chiller models. Limited availability on non-YORK models. Check with your Johnson Controls representative for details.

** Certain limitations apply. Contact your Johnson Controls sales representative for more details.

MAINTENANCE – OPTIONS

Maintenance practices that will help extend the life of your equipment and keep it running at peak performance:

- Chiller shutdown
- Chiller startup
- Oil change
- Tube brushing
- Condenser coil cleaning
- Water treatment
- Training

PREDICTIVE MAINTENANCE – OPTIONS

Maintenance practices that will help identify potential problems before they cause damage or catastrophic failures:

- Vibration analysis
- Oil analysis
- Refrigerant analysis
- Oil filter analysis
- Eddy current analysis
- Lithium bromide analysis

REMOTE MONITORING – OPTIONS

Services that use our 24/7 Remote Operations Center to identify potential problems and corrective actions:

- HVAC/BAS Monitoring
- Chiller MD (Monitoring and Diagnostics)
- Vibration monitoring and alarming
- Critical facility management

A strategy created to meet your needs

The goal of an optimized maintenance strategy is to develop a sustainable maintenance program for your chiller that helps extend asset life and reduce overall facility costs. We'll develop a service strategy around your requirements, the level of service and technology you want, and the goals you want to achieve. This strategy can combine reactive, planned and predictive service support, as well as advanced technology options for monitoring and analysis.

Maintenance Options

Chiller shutdown – Our technicians will properly and safely shutdown your chiller to ensure no damage occurs and no refrigerant is lost.

Chiller startup – Proper startup procedures after an extended shutdown ensure reliable and efficient operation during the cooling season. Johnson Controls technicians will evaluate chiller sub-systems for proper operation and perform operational checks to ensure optimal performance.

Oil change – Our technicians will change the compressor oil, which is the lifeblood of the compressor. Keeping clean, moisture-free oil in your unit minimizes the opportunity for lubrication-related failures, costly repairs, and unscheduled downtime.

Tube brushing*** – Dirt, mineral or biological scale (algae) on chiller tubes prevents the efficient transfer of heat from the chilled water to the cool refrigerant. Our technicians will brush the tubes, clearing this scale, which improves heat transfer and efficiency.

Condenser coil cleaning*** – Johnson Controls technicians will clean the condenser coils on a regular basis. Dirty, damaged and/or oxidized condenser coils can impair the unit's ability to reject heat to its surroundings.

Water treatment*** – Johnson Controls technicians work with approved chemical suppliers to develop a water treatment system to make sure your cooling system works efficiently and is trouble-free over its operating life.

Training – Our technicians can conduct on-site training for your staff.

ENERGY STAR benchmarking – If you want to better understand your facility's energy performance, or are required to benchmark your facility due to local or state regulations, we can perform the benchmark, provide you a summary report, and keep your information up-to-date.

Predictive Maintenance Options

Vibration, oil* and refrigerant analysis** – Data from your chiller is collected by Johnson Controls personnel and uploaded to our predictive diagnostics team for analysis. It is then compared with standards, which have been statistically derived from more than 20 years of compiled data using patented formulas. This allows you to identify and correct potential issues before they cause unscheduled downtime.

Oil filter analysis – Oil filters are analyzed and replaced. Plugged oil filters can greatly reduce the reliability of the unit and lead to nuisance tripping of the machine, causing occupant discomfort. Replacing the filter driers on the oil return will assure that oil can be returned to where it is needed.

Eddy current analysis – Determines the condition of tubes and can detect possible holes or leaks, reducing unscheduled downtime due to tube failure.

Lithium bromide analysis – The lithium bromide charge will be analyzed for inhibitor content, as well as the presence of contaminants. Johnson Controls will provide recommendations to maintain the proper heat transfer performance and corrosion protection.

*** Required to maintain most YORK® warranties. Contact your Johnson Controls sales representative for more information.

Remote Monitoring Options

Our remote monitoring options leverage the power of our Remote Operations Center, a 5-Diamond Certified center from the Central Station Alarm Association. Less than 5% of monitoring facilities have achieved this prestigious designation.

HVAC /BAS monitoring**** – Let our ROC watch over your building automation system 24/7. This service allows you to define which HVAC/BAS alarms are important to you and how you'd like us to respond, giving you peace of mind that critical issues won't be missed whether you're in the facility or away.

Chiller Monitoring and Diagnostics (Chiller MD) – Analysts monitor chiller performance and report any abnormal operating conditions. When less than optimal conditions are detected by our system and chiller experts, we'll work with your team to quickly resolve problems.

Vibration monitoring and alarming – Overall vibration levels are measured at various locations on your critical pieces of equipment. The vibration data is stored and trended to detect any changes in machine operating conditions. Once a problem is detected, technicians can do further analysis to identify and fix the root cause of the problem.

Critical facility management – Our software tools and expertise improves our ability to analyze key performance and capacity metrics on mechanical and electrical infrastructure, turning data into information that can be used to improve the efficiency and reliability of a critical facility.

Customer Portal

With a Planned Service Agreement, the customer portal is the way to view all service requests, invoices and activities for your site locations. Access reports, request service, and review past, present and future service jobs, all at the click of a button. And better yet, you can retrieve all of this information on your time, when you need it.

**** May not be compatible with all controls systems. Contact your Johnson Controls sales representative for more details.



There are five reasons to choose planned maintenance: to identify energy savings opportunities, reduce future repair costs, extend asset life, ensure productive environments, and improve environmental health and safety. All of the services we perform on your controls and equipment are aligned with "The 5 Values of Planned Maintenance."