Mechanical Equipment

Services for air handling units and coils; rooftop units; condensing units and condensers; terminal units; cooling towers; variable frequency drives; boilers, furnaces and infrared heaters; fans, pumps and motors; and other general mechanical equipment.

	SERVICE COMPLETE	
	BASIC	PREMIUM
DESCRIPTION	Inspection and maintenance program designed to identify issues preventing covered equipment from running efficiently. Recommendations will focus on Johnson Controls 5 Values of Planned Maintenance.	Inspection, maintenance and repair program for customers who want budget predictability and protection from unplanned failures of covered equipment.
Recommended Number of Visits	4 annual visits (3 operational, 1 comprehensive)	4 annual visits (3 operational, 1 comprehensive)
Scheduled Operational Inspections	✓	✓
Scheduled Comprehensive Maintenance	✓	✓
Scheduled Service Parts*	✓	✓
Prioritized Unscheduled Service	✓	✓
Unscheduled Repair Parts*		✓
Unscheduled Repair 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

*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:

- Condenser coil cleaning
- Evaporator coil cleaning
- Fan balance
- Combustion analysis
- Filter replacement
- Oil change
- Cooling tower startup
- Tower/Basin cleaning
- Water treatment

PREDICTIVE MAINTENANCE – OPTIONS

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

- Vibration analysis – fans, pumps
- Alignment/Balance
- Ultrasonic leak testing
- Motor current/ electrical analysis
- Megger testing
- Infrared testing
- Rooftop diagnostic testing

REMOTE MONITORING – OPTION

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

- Vibration monitoring and alarming

PRODUCTIVITY – OPTION

Services that will help you enhance your facility and keep it running smoothly:

- Panoptix®

THE 5 VALUES OF PLANNED MAINTENANCE

IDENTIFY ENERGY SAVINGS OPPORTUNITIES | REDUCE FUTURE REPAIR COSTS | EXTEND ASSET LIFE | ENSURE PRODUCTIVE ENVIRONMENTS | ENVIRONMENTAL HEALTH AND SAFETY

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."

Johnson Controls

A strategy to meet your needs

The goal of an optimized maintenance strategy is to develop a sustainable maintenance program for your mechanical equipment 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

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

Fan balance – Data is collected to assess and correct the presence of fan imbalance or misalignment.

Combustion analysis – Technicians will analyze the flue gas to determine if optimal fuel/air ratios are present, and make adjustments for efficient operation.

Filter replacement – Clean air filters help maintain proper airflow throughout your building, so our technicians will replace the filters on a regular basis, maximizing air quality.

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.

Cooling tower startup – Proper cooling tower startup can reduce operating expenses and help guard against unscheduled downtime during critical periods. Our technicians will clean the tower before filling, then adjust make-up, bleed, and blow-down water to minimize water usage and sediment build-up in the tower sump.

Tower/Basin cleaning – During operation, a cooling tower becomes a natural repository for wind-blown debris, which our technicians will clean out to prevent blockage and potential damage to critical system components.

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.

Predictive Maintenance Options

Vibration analysis – fans & pumps – Data is collected at various points on the machine, which is then used to assess the condition of all parts, and can detect the presence of imbalance or misalignment. This means that our technicians will know when repairs are necessary.

Alignment/Balance – Misalignment can impact performance. Our technicians use only laser alignment or reverse dial indicator equipment to correct the problem, and then use vibration analysis to ensure success.

Ultrasonic leak testing – Identify and locate a liquid or gas leak in a system, which technicians can then repair.

Motor current/electrical analysis – This determines the condition of a motor's rotor. We collect a spectrum of the power supply to the motor. Then we analyze it to detect any problems or issues.

Megger testing – Test for potential shorts, insulation breakdown and leakage, and identify excessive moisture in a motor. Megger testing is a simple test that can prevent stator failures and minimize secondary damage.

Infrared testing – Used to detect hot spots caused by poor or corroded connections, as well as bad bearings and misalignment.

Rooftop diagnostic testing – A diagnostic tool measures and analyzes the performance on small to medium rooftop units. A report is generated and indicates unit condition, performance and efficiency results, cost to operate, and potential energy wasted due to poor operating conditions, and recommendations to improve performance. Actions can then be taken to reduce operation costs and wasted energy, and increase capacity.

Remote Monitoring Option

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, and technicians can fix detected problems.

Productivity Option

Panoptix – With the Panoptix building efficiency platform, you can review equipment performance, pinpoint wasted energy, assess effectiveness, monitor and report on carbon emissions and energy efficiency, and much more. Data is pulled from multiple systems, like Metasys®, and presented in a way that lets you act on the information.

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.

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