

Boilers

Services for water, domestic hot water and steam boilers powered by gas, oil or electricity.

DESCRIPTION	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 and Data Backup (if applicable)	✓	✓
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.

<p>MAINTENANCE – OPTIONS</p> <p>Maintenance practices that will help extend the life of your equipment and keep it running at peak performance:</p> <ul style="list-style-type: none"> • Combustion analysis • Boiler blow-down • Heat exchanger cleaning – fireside and tube brushing • Combustion device safety testing • Water side cleaning and tube brushing • Water treatment • Ultrasonic steam trap survey 	<p>PRODUCTIVITY – OPTIONS</p> <p>Services that will help you enhance your facility and keep it running smoothly:</p> <ul style="list-style-type: none"> • Panoptix®
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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.”

A strategy to meet your needs

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

Pair the below options with your regularly scheduled service visits to help extend the life of your boiler and keep it running at peak performance:

Combustion analysis – Combustion analysis and subsequent adjustments are critical to efficient boiler operation. Boiler fuel, whether natural gas or oil, must burn in the proper combination of fuel and air (oxygen). Poor combustion can create soot deposits on the tubes, impairing heat transfer. Incomplete combustion can also lead to the potential formation of CO (carbon monoxide), an odorless gas that can harm occupants in the mechanical room and/or building. Johnson Controls technicians will analyze the flue gas to determine if optimal fuel/air ratios are present and adjust, if necessary.

Boiler blow-down – Boiler blow-downs are performed at appropriate intervals by Johnson Controls personnel to assure optimal boiler performance. Proper blow-down can reduce the amount of water, fuel and treatment chemicals needed. Because less dissolved solids are present, maintenance and repair costs can also be reduced, due to a reduction in the amount of carryover and deposits. This can also reduce operating expenses.

Heat exchanger cleaning - fireside and boiler tube brushing – Boiler heat transfer surfaces must be kept clean to provide for safe and economical boiler operation. Corrosive elements are often present in the soot and scale that is deposited on tube walls, increasing the probability of tube failure. Johnson Controls technicians will brush tubes to clean these surfaces, and open up the boiler face to ensure soot is removed from the fireside of the boiler without opening the water side. This improves heat transfer, optimizes efficiency, and reduces potential corrosion and safety issues.

Combustion device safety testing - Testing safety devices on your boiler, such as low water cut off, flow switches or fuel bleed valves, can not only reduce the risk of a catastrophic failure, it may also be required by the local government. Johnson Controls can provide comprehensive combustion safety device (CSD-1) testing to meet government requirements and ensure the safety of your boiler system.

In addition, our highly skilled, safety-minded technicians can perform these boiler maintenance options:

- **Water side cleaning and tube brushing**
- **Water treatment**
- **Ultrasonic steam trap survey**

Productivity Options

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.