

# Babcock & Wilcox Field Engineering Services

*Trusted for your boiler and air quality  
control systems*



BABCOCK  
& WILCOX

RENEWABLE | ENVIRONMENTAL | THERMAL

Babcock & Wilcox (B&W) responds to and solves our customers' toughest challenges. From concept and commissioning to maintenance and modifications, we're there every step of the way to keep your steam generation and environmental equipment operating safely, reliably and efficiently.

- » Startup and commissioning
- » Project services
- » Routine and preventative maintenance
- » Troubleshooting
- » Environmental services
- » Boiler performance and efficiency services
- » Outage support
- » Technical training

## Our people make the difference

B&W's highly skilled field engineers and specialists are strategically located in offices worldwide to assist you in improving your equipment and operations. You can depend on us to quickly respond 24 hours-a-day, seven days-a-week.

### Field service engineers

- » Provide a broad range of utility, industrial and pulp and paper plant services
- » More than 135 highly skilled engineers and technical specialists worldwide

### Service specialists

- » Available for specific equipment challenges that require highly specialized experts
- » Average more than 20 years of experience
- » Focus on specific areas such as burners and controls, pulverizers, environmental systems, water chemistry, metallurgy, and other plant equipment and processes

### Resident service engineers

- » Single point-of-contact who is highly knowledgeable about your plant and its equipment, and provides long-term plant service and support
- » Regularly works with your operations, maintenance and engineering personnel
- » Provides replacement parts and upgrades support



## Startup and commissioning

Safe and timely commissioning of steam generating and environmental equipment is critical for a successful project. Proper strategic planning is key to avoiding delays, cost overruns and potential safety hazards. B&W service engineers offer worldwide support for the startup of plant equipment.

Service benefits include:

- » Dedicated startup and commissioning staff
- » Proven and organized planning process
- » Seamless integration between engineering systems
- » Simplified and structured turnover of plant operations

## Project services

Whether lowering emissions, changing fuels or increasing steam capacity, our service engineers and specialists can help you determine the necessary course of action to meet your overall objectives.

- » Engineering studies
- » Enhancement projects
  - Upgrades
  - Capacity increases
  - Fuel switching and natural gas conversions





## Routine and preventative maintenance

We provide on-demand services and tailored maintenance programs – based on your needs – for critical components, systems or your entire boiler and air quality control system.

- » Inspections
- » Critical component (pressure part) assessment
- » Mechanical and structural evaluation, including stress testing
- » Tube failure analysis
- » Chemical cleaning
- » Code compliance

## Troubleshooting

Determining the root cause of equipment problems is essential. While working with your staff, our service engineers review operating data, inspect equipment and perform the necessary diagnostic tests to locate, identify and correct the problem.

## Environmental services

B&W environmental field specialists offer expert analysis for utility and industrial air quality control systems. Specialists are available to provide a wide range of services – such as efficiency improvements, upgrades and replacement parts recommendations – regardless of the equipment manufacturer.

Services are available for your entire air quality control system:

- » Wet and dry flue gas desulfurization systems
- » Selective catalytic reduction systems
- » Wet and dry electrostatic precipitators
- » Fabric filters
- » Multiclone® dust collectors
- » Turbulaire™ scrubbers



# Boiler performance and efficiency services

Our service engineers have knowledge and experience to help you successfully operate your boiler.

## Boiler operations

Our comprehensive, performance optimization services help keep your boiler operating at optimal efficiency. Areas of focus include water circulation, air and gas flow, combustion, pressure parts, heat transfer, air heater operation, controls, valves and other critical elements of the boiler.

## Burners and pulverizers

It is important to keep burners tuned and adjusted for optimum operation to help ensure steam load reliability and response rates while controlling emissions. Pulverizer performance is also vital for efficient boiler operation and slag control. Our service and design engineers work in tandem to optimize the efficiency of your fuel preparation and combustion systems.

## Intelligent performance-enhancing systems

B&W offers a full line of intelligent systems designed to optimize boiler operations. These diagnostic systems, based on advanced logic, boiler models, and empirical and directed expertise, address interaction of combustion and heat transfer performance.

Systems include:

- » Powerclean® intelligent sootblowing
- » Aquatect™ water cleaning control
- » Flame Doctor® combustion diagnostics
- » Heat Transfer Manager® real-time performance data
- » FocalPoint™ control optimization
- » EvenFlow™ coal flow controller





## Outage support

We work with you to plan and manage your outage with the primary goal of finishing safely and on time. Our program is tailored to meet your needs. In addition to a thorough boiler evaluation, we'll work with your staff to address maintenance and labor requirements, replacement parts and other support materials and services.

## Technical training

Training plant personnel to properly operate and maintain equipment can help improve plant safety, ensure reliable systems performance, and reduce operating costs and downtime. We provide an extensive training curriculum on all B&W equipment as well as job-specific tasks for plant operations and maintenance personnel.



*Plant owners and operators worldwide depend on our team of expert service engineers and specialists.*



### The Babcock & Wilcox Company

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Established in 1867, Babcock & Wilcox is a global leader in renewable, environmental and thermal technologies and services for power and industrial applications.

For more information or to contact us, visit our website at [www.babcock.com](http://www.babcock.com).

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