



## Boiler Upgrade/Retrofit Solutions

In today's marketplace the need for reducing your operating costs is greater than ever. Equally important is your need to operate at peak levels of efficiency while complying with safety and emissions regulations, as well as reducing your carbon footprint.

Can-Technologies can provide you with a Boiler Control Solution that will increase your bottom line profitability. This is achieved by optimizing the operation of your boiler and reducing your fuel usage. A reduction in undesirable emissions can also be realized to ensure that you meet a growing list of internal and external compliance metrics.

Our engineering experience in boiler protection, burner management systems, combustion control systems and balance of plant controls enables us to provide you with a cost effective, safe and regulatory compliant solution with a high return on investment.



### **Burner Management Systems (BMS)**

A Burner Management System allows for the safe start-up, operation and shutdown of boilers, ovens, kilns, furnaces and incinerators. An effective Burner Management System can reduce your start up time and increase overall system safety by protecting the combustion process equipment from damage.

Burner Management Systems can be designed by Can-Technologies to accommodate various fuels including gas, oil, combined gas/oil burners and industrial multi-fuel burners.

Burner Control Systems can be Single or Multiple Burner types. Control elements include:

- Purge Permissives
- Purge Sequence
- Burner Permissives
- Burner Start/Stop Sequences
- Burner Monitor
- Burner Trip, Trip First Outs
- Boiler Trip, Trip First Outs
- Fuel Header Permissives
- Fuel Header Trips

### **Combustion Control Systems (CCS)**

A Combustion Control System coordinates the control of fuel(s), process system variables, product/recipe demand management and material handling, while providing operators with a variety of combustion process monitoring tools.

A Combustion Control System can simplify unit operations, enhance combustion efficiencies and improve operator understanding of the process.



Combustion Control System elements include:

- Plant Master (Steam Pressure)
- Boiler Master
- Fuel Master
- Air Master (Oxygen Trim Optional)
- Furnace Pressure
- Drum Level (1 / 2 / 3 Element)
- Blowdown
- Steam Temperature
- Air Temperature
- Feedwater Temperature

*"Providing Quality Services & Attention to Our Customer Needs."*



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### Balance of Plant

Balance of Plant refers to the ancillary process or power plant control elements not included within the main boiler control systems. Can-Technologies can provide Balance of Plant functions on a stand-alone system basis or integrated with your Combustion Control System.

Balance of Plant controls coordinate peripheral devices such as conveyers, pumps and motors to help improve process efficiency and reduce energy consumption. Systems that may be considered Balance of Plant include:

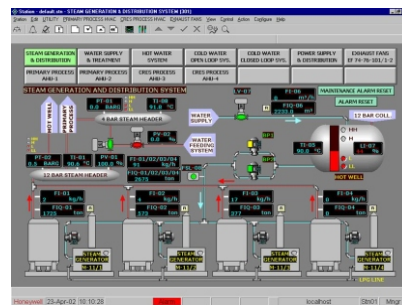
**Water Treatment** - Water treatment system failures can be detrimental to your bottom line, forcing you to rent expensive temporary equipment or worse, shutting down your entire process. Water treatment solutions include:

Water Treatment - Boiler feedwater and process applications including demineralizer monitoring, sequencing, regeneration, influent/effluent, recycle control and VFD control

Waste Water Treatment - Data acquisition, logging, trending and control encompassing the pond, pond screen, agitator, diverter control, reverse osmosis and water sampling subsystems

**Material Handling** - Our Material Handling control solutions accommodate virtually any bulk material handling application providing the following control and functionality: Conveyor Sequencing, Feeder Control, Conveyor Control, Flop Gate Control, Tripper Control, Dust Collection and Suppression Control and Sampler System Control.

**Data Acquisition** - Can-Technologies can provide customized Data Acquisition solutions to gather, organize and present data from your process to support decision-making by your operations, maintenance and management teams. Our Data Acquisition solutions help you improve operational efficiency, reduce unplanned downtime through improved troubleshooting capability and quantify long-term operational trends for management analysis.



Through its customer focused engineering, Can-Technologies offers you solutions that provide the visualization, analysis and insight to optimize your operations and supply measured performance improvement, sustainable advantage with a high return on investment.

Services include:

- Initial System Evaluation - Discovery
- System Designs to NFPA/CSA/SIL Codes
- Code/Regulatory Compliance
- System Optimization
- Igniter, Flow Monitoring and Control Systems
- Flame Detection and Analysis
- Master Fuel Trip (MFT) Circuit Design
- P&ID Generation, Logic Flow and One-Line (SAMA) Diagrams
- Control Platform Programming, Configuration & Testing
- Efficiency (Real-Time) Calculations
- HMI System Design/Development
- Electrical Power and Control Panel Design/Fabrication
- Data Acquisition System Development
- Integration, Installation and Commissioning
- Factory & Site Acceptance Testing (FAT) & (SAT)
- Training, Documentation & On-Going Support
- Retrofit/Upgrade Services
- Legacy System Support