

Boiler & Furnace Control Solutions

PCT Engineered Systems' Combustion Services Group can design a new combustion control system for your boiler or furnace or re-engineer an existing system that is quietly costing you time and profit. Our team of professional engineers will analyze the system and compile any data needed to insure the design meets the requirements of our clients as well as industry standards. Our group has an extensive background including industrial boiler controls and most types of furnaces, including ferrous and non-ferrous applications.

In addition to these services we can provide extensive on site training on proper operating procedures, system inspections, and combustion safety awareness. Training we provide will be specifically matched to your company's requirements and will be performed at your facility.

Our Combustion Services Group, along with the entire PCT team will find the solutions you need to bring your system up to date. Together we can increase your equipment's efficiency, provide a safer working environment and **save lives**.

Perform a thorough **inspection** of your boiler or furnace's performance including cold inspection, survey of thermal distribution and documentation of energy efficiency.

Conduct required checks of the safety interlocks.

Outline **deficiencies** and propose changes to procedures and equipment.

Supply **construction** crews or assist in supervising your crews.

Develop the entire **design** package necessary to modify your existing combustion system or build a new one if required.

Conform your system to newest federal (**OSHA**) and other regulations (**NFPA**).



Project management throughout the installation and start-up phase.

Provide system **documentation** including operating manuals with shutdown procedures, operating screens, maintenance instructions and tuning parameters.

Purchase, preassemble or fabricate **custom equipment** including gas trains and control panels.

Provide an initial report by completing a comprehensive system **checklist**.

Compile **insurance** provider submittal packages.

Train both maintenance and operating personnel.

SAFETY PROJECTS

PCT has completed hundreds of Combustion Safety Assessments for boilers and both direct and indirect fired process furnaces.

As a result of these assessments, we have provided the design, hardware installation support, start-up support documentation and training needed to bring those combustion systems into compliance.

MAINTENANCE PROJECTS

PCT has the capability to evaluate a combustion system and then recommend repairs to improve performance and maintainability.

These projects have involved repair or replacement of controls, burners, flame detectors, baffles, rails, coil cars, floors, radiant tubes, seals, door frames and sometimes shell or insulation repairs.

NEW CONSTRUCTION

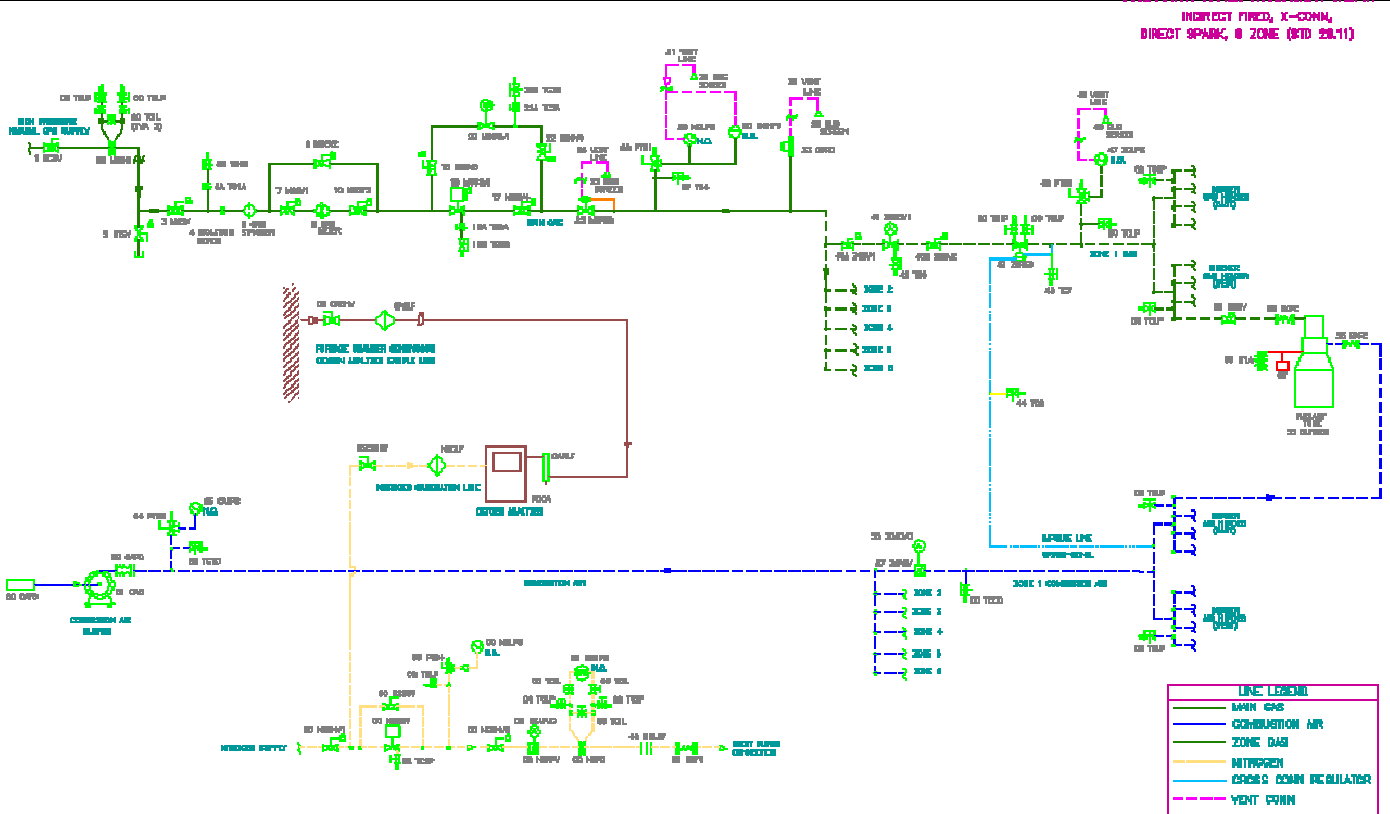
PCT has also supported the construction of new furnaces by writing unique customer specifications or by working with furnace manufacturers to provide electrical/control design, complete control houses and installation/start-up support.

We have also provided turnkey project design and management.

UPGRADE PROJECTS

PCT has performed many turnkey upgrades to industrial process furnaces. These include revisions from electric to indirect gas fired, increases in load capacity and improved door designs.

We have also redesigned rail and coil car arrangements for reduced maintenance.



PCT's design team will develop the entire package necessary to modify your existing system or build a new one if required. A typical PCT design package includes: piping schematics and layouts; bills of materials for mechanical and electrical equipment; wiring diagrams, electrical schematics and control panel layouts; PLC programming and MMI screen development.

PCT

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