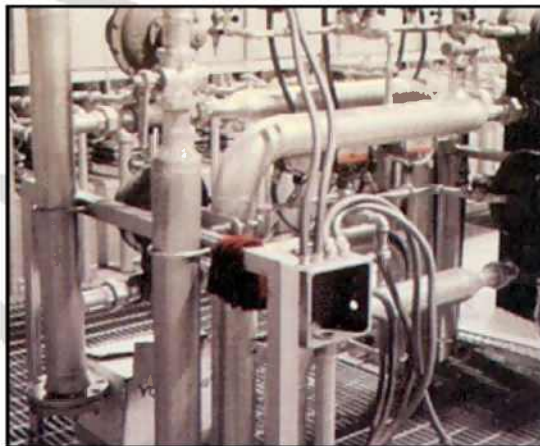




# Combustion Safety Assessment

Maintaining the combustion system of a furnace or oven should be an integral part of the entire furnace maintenance program. The many dangers of operating a oven or a furnace are realized in great detail from performing a combustion system assessment. **Combustion system failures result in lost equipment, lost production, and lost revenue.**



PCT Engineered Systems' Combustion Services Group (CSG) puts their vast combustion knowledge together to offer an excellent combustion safety assessment package that includes;

## ***What's included:***

- Thorough **on-site evaluation** of your existing combustion system. PCT's field technicians will come to your plant and inspect your installation. We will outline the gas train configuration, document the device brands and models used, and take note of current settings. We will gather the relevant documentation and program files. Our team will also interview your operating and maintenance personnel. Typically this step takes only one to two days.
- **Analysis of existing system documentation.** The PCT team will study your existing gas train schematics, electrical schematics and programmable controller logic. The devices installed will also be reviewed to ensure they are applied correctly.
- **Review of current operating and maintenance procedures.** We will also review your operating and maintenance procedures to determine their suitability.
- **Detailed report covering any compliance issues discovered** and a plan for addressing any shortcomings. Within two weeks from the on-site evaluation, you will receive a report from PCT. Our findings and recommendations will be summarized and supporting references from the relevant standards (NFPA, FM, corporate) will be included.



## ***The PCT Combustion Safety Assessment:***

- Identifies issues that can destroy equipment and injure personnel.
- Is the first step in developing a well-defined plan for bringing equipment into compliance with corporate safety edicts and insurance carrier requirements.
- Provides peace of mind knowing that your systems have been evaluated by qualified experts.



## **The PCT Solution**

Familiarity with the customer's combustion standards, as well as NFPA combustion standards, made PCT Engineered Systems, LLC the integrator of choice to provide the resources for field and design research. PCT creates documentation detailing the areas of the furnace not in compliance with current safety standards. PCT also develops bills of materials, drawing packages and work packages to allow the customer to receive quotes from contractors for specified work to upgrade furnaces. Allen-Bradley PLC's are installed and programmed to provide the integration of safety logic to current standards.

The major improvements include increased safety of the furnaces and replacement of outdated equipment. Furnaces will be modified to the extent of replacing all burner equipment (valves, burner tubes, fans, etc.) to allow for a more efficient and maintainable furnace.

PCT will supply extensive documentation detailing the required safety upgrades for each furnace. PCT also supplies the customer with detailed drawing and work packages to allow for quick and efficient upgrades. The work packages include the identification of old equipment to be replaced, asbestos wiring to be removed; and obsolete gas and nitrogen piping and valving. PCT also helps with various design improvements relating to the furnace structure and control system.

### **Why PCT / The PCT Difference:**

- **Dedicated team of experienced professionals.** Our Combustion Services Group is focused on improving and properly maintaining combustion systems. That's what we do every day.
- **Well versed on relevant compliance standards.** As a member of **NFPA (National Fire Protection Association)** we are committed to staying current on the latest code revisions. The members of our Combustion Services Group receive regular training on the NFPA code. We are also knowledgeable on the requirements for submittal packages to **FM (Factory Mutual)** and other insurance carriers. Some of our customers have additional corporate standards and we can adapt our assessment to address these requirements as well.
- **You are dealing with a single group capable of evaluating your situation, implementing a solution and supporting the maintenance of the system.** In addition to the range of services provided by our Combustion Services Group, you can also leverage the support of TeamPCT. This includes mechanical engineering, design and fabrication; control system design, programming and assembly; and process data integration and reporting.

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