Pollution Control Products
Thermal Stripping Ovens & Furnaces

For parts with up to 15% combustibles
Maximum 800°F (427°C)

PCPC's Controlled Pyrolysis® models have a highly effective patented system that anticipates and prevents overheating. The ovens have a highly sensitive control system for added protection and operational flexibility. These furnaces can remove the same combustible materials as Dry Cleaner models, but in greater quantities: 2% to 15% by weight.

Included in the ovens are primary and back-up water spray features with multiple built-in safety features.

Located in the afterburner stack, this sensitive system (U.S. Patent 4,270,898) monitors the rate of smoke emission from the parts by measuring the stack temperature. When the stack temperature reaches a preset point, the stack controller turns on a water spray mist to cool the parts, lowering the smoke emission rate before it reaches an ignition state. The water spray also activates if the oven temperature exceeds its set-point temperature by 30°. A back-up water spray activates should the water spray nozzles become clogged or malfunction in anyway. Additionally, a manual-reset high-limit temperature controller turns off the primary burner if the oven temperature controller should fail.

Key Advantages

- Controlled pyrolysis is a safe process that helps to clean and extend the life of your industrial parts in a method that doesn't pollute or harm the environment.
- Our controlled pyrolysis ovens eliminate hydro-carbon emissions and the use of hazardous chemicals and abrasives.
- The control system is easy to operate and helps to ensure safe and thorough cleaning with reduced labor costs to you.

Controlled Pyrolysis® Model Features

- **Patented Controlled Pyrolysis® Water Spray System** controls the rate of smoke emissions preventing damage due to ignition or over-heated in the furnace. **Standard**
- **Optional Burners available:**
  1. Natural Gas
  2. Propane Gas
  3. Number 2 Fuel Oil
- **The Primary Burner** heats the cleaning chamber to 800°F (427°C). Volatile materials are driven off as smoke. The burner flame is confined to the combustion chamber never touching the parts. **Standard**
- **Back-Up Water Spray** if nozzles are clogged. **Standard**
- **Manual-reset high-limit switch Standard**
- **The Afterburner** operating at 1400°F (760°C) for ½ second burns the smoke consuming the pollutants, leaving only invisible, odorless and harmless water vapor and carbon dioxide to exit the exhaust stack.
- **Explosion Relief Door(s)** automatically opens to relieve excess pressure then closes preventing air from reaching combustible materials.
- **Diagnostic Panel** indicator lights reflect the operational status of the oven and its controls. Indicator light failure pin-points the problem. **Standard**

Specifications and Data

Cabinet: Heavy-gauge sheet steel supported by structural steel angles and channels. All-welded construction with sealed seams to prevent leakage give maximum fuel economy.

Floor: Hard castable refractory. 3?- 4? thick, reinforced with structural steel channels. Allows easy removal of ashes.

Doors: Equipped with cam-type lock assemblies, tadpole sealing gaskets, and stay-open hooks. Doors open 270°.

Explosion Relief: Unique gravity-sealed top relief automatically opens to relieve excess pressure, then closes, preventing air from reaching combustible material.

Insulation: Walls, ceiling, and doors covered with 3? of a two-layered lightweight ceramic fiber blanket insulation anchored on stainless pins, wire mesh and locking washers. Contains no asbestos. Perforated metal liner protects insulation from mechanical damage. Furnace insulation rated at 2300°F (1275°C).

Vent Stacks: Made in 36? long lightweight sections for easy erection. Stainless steel metal exterior lined with high-temperature ceramic fiber in hard form. Sections snap together.

Fuels: Natural gas, Propane gas, or #2 fuel oil. Gas pressure requires: 11inches W.C.

Electrical Service: 110-125 volts, 50-60 hertz, single-phase, 5-10 amp. draw.

Water Supply: Minimum pressure 40 psi; maximum 100 psi for water injection system.

Maximum flow rate 5-7gpm (liter/min.)

Normal Cycle time: 3-5 hours plus cooling time. Timer adjustable 0-12 hours with dual frequency dial for 50 and 60 hertz. (Automatic features available)

Normal Cycle Temperature: 750°-800°F (399-430°C)

Pollution Standards: Meets latest E.P.A. Standards.

Safety and Health Standards: Meet latest O.S.H.A. Federal Standards. Can be equipped to meet 86

Insurance Standards: Meets most state and local code. Can be equipped to meet Factory Mutual or IRI Standards.

Anti Corrosive Vapor Barrier: Prevents corrosive vapors from condensing on inside furnace walls. Greatly extends useful life of furnace.

Combustion Chamber Protection Guard: A heavy-duty steel barrier, built around the upper and lower combustion chambers, protect from errant or careless loading.

Multi Style Cart Available: Can uniquely meet your individual loading requirements through several different cart styles (standard with oven).

Commercial Gas Burner: Designed specifically for incinerator and other similar applications. Features including superior no-clog nozzle design, easy maintenance, and heavy-duty construction. Burners are equipped with a patented automatic self-cooling system that inhabits burner damage.

Authorized PCP Distributor
Sales, Installation & Service

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