

ELECTRIC FTO

FLAMELESS THERMAL OXIDIZER



**High
Destruction
Efficiency,
Low NO_x,
Electrically
Heated**

The *PCC Electric FTO (EFTO)* consistently treats Volatile Organic Compounds (VOCs) in waste gas streams yielding removal efficiencies of 99.9999%. The thermal oxidation is accomplished at 1800°F to avoid production of thermal NO_x and to minimize operating costs. Thermal NO_x levels are <1 ppmv.

The *PCC Electric FTO* consists of a carbon steel, refractory-lined oxidation vessel. The vessel contains three spiral-wound electric resistance heater elements in 310SS protection tubes surrounded by a bed of randomly packed inert ceramic saddles. The *PCC Electric FTO* is fully automatic and there are no moving parts in the oxidizer. Alternate materials of construction are available as required based on the waste gas composition. A typical system requires 480V 3phase 100 amp, 120V 1 phase 20 amp, and 5 scfm of instrument air at 80 psig.

**How the PCC
Electric FTO
Works**

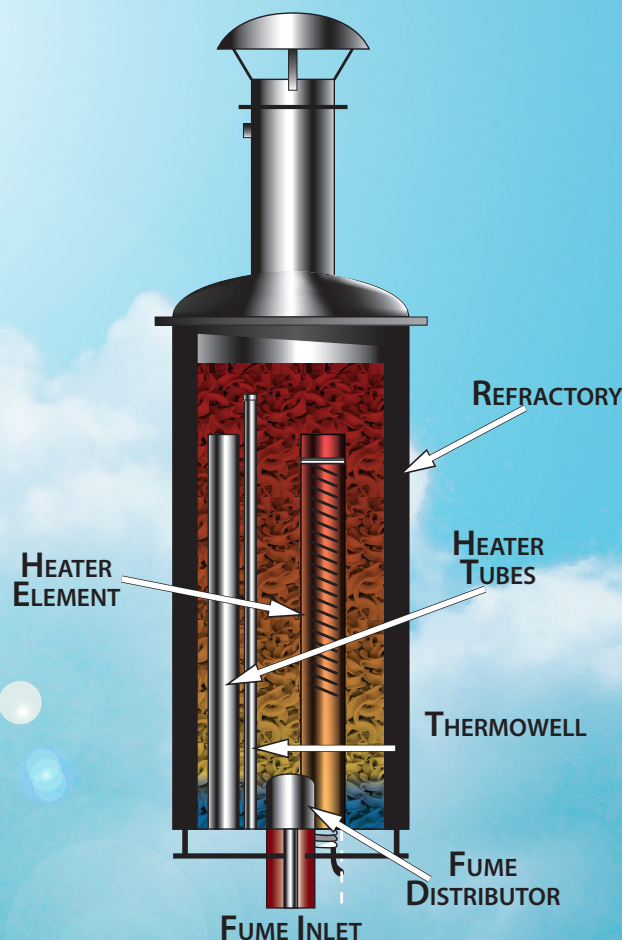
The *PCC EFTO* consists of a vertical, refractory-lined vessel filled with ceramic media. The ceramic media is pre-heated to a calculated temperature through the use of an electric resistance heater. Electrical energy is only required as a supplement to the heat content of the fume and to preheat the ceramic bed during start-up.

The waste gas and air are pre-mixed at the bottom of the vessel and introduced into the unit. The organic compounds found in the waste gas are oxidized and discharged into the atmosphere via a stack extension on the top of the unit.

The *PCC Electric FTO* operates well below the Lower Flammable Limit (LFL), eliminating the possibility of a flame within the system. The fume oxidizes as it passes through the oxidation zone releasing heat, which is transferred into the surrounding ceramic matrix thus maintaining the operating temperature of the bed without the need for supplemental heat via the electric heaters.

**Simplicity of
Design**

The *PCC EFTO's* simplicity of design and portability make it a multi-purpose piece of equipment for multiple low volume gas treatment applications. The *PCC EFTO's* standardized design requires minimal customization. The modular configuration makes it simple to install.



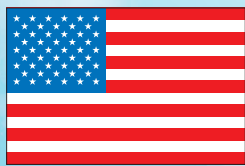
PROCESS COMBUSTION CORPORATION

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Representatives are located in major US Cities, Canada, Asia, and selected countries, visit www.pcc-group.com to find your local agent.



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