

Pollution Control Systems

Our range is designed in a way that all exhaust gas has to pass through a secondary burner for complete re-burn of harmful gas components. Exhaust gases are then retained at a high temperature (850 - 1200 C, depending on the application) before releasing to atmosphere.



BASIC Pollution Control

Dioxins, furans and similar gaseous components are only destroyed by:

- Homogenous high temperature (> 850°C)
- Excess of oxygen (>6 %)
- Sufficient residence time at high temperatures

Our incinerators are designed to ensure all 3 conditions are met.

The three conditions above prevent dioxins from "cracking" into smaller but reactive dioxins, which can reform into new dioxin molecules, especially in the presence of heavy metals which can act as catalysts. (Reformation and "de novo" formation).



ADVANCED Pollution Control

Advanced Pollution Control System
As the gas stream is introduced into a scrubber box, it is forced to pass through a converging section, where (*in accordance with the Bernoulli equation*) gas stream velocity is rapidly increased. The throat section between pipes is where particle and gas removal occurs as the inlet gas stream mixes with the fog of tiny liquid droplets.

Scrubbing liquid is introduced into the system using a high pressure pump (70+ bar) and a set of 8 micronic nozzles.

Part of the scrubber liquid that doesn't evaporate in the process is released from the system using specially designed valve on the bottom of the scrubber box.



LARGE SCALE Pollution Control

The pollution control system captures all the gases, soot and entrained solids emitted by the incinerator and process them to meet the European regulations, which are set out in directive 2000/76/EC, dated 4th Dec 2000.

System features:

- Remove particulates by direct capture in the ceramic filter
- Remove acid gases by reaction with hydrated lime and capture of the resulting solid
- Avoid 'de novo' dioxin formation by removing necessary reactants before the gases cool to the temperature window where formation occurs
- Remove condensed heavy metals as particulates in the filter

INCINER8 leading the global market in clean air thermal treatment, dispelling the myths of incineration