

SECONDARY COMBUSTION CHAMBER

The secondary chamber is where waste in the gaseous phase is treated. Combustion gases from the primary chamber are transferred into the secondary chamber for thermal treatment.

Where necessary, the design and volume of the chamber will be established by the development of a computer Fluid Dynamic Model using Phoenix 2008 combustion and chemical reaction software.

Constructed as a refractory lined steel structure, as per the primary chamber, additional combustion air is added at the inlet of the secondary chamber via a series of nozzles. Additional heat when required is also provided by an afterburner. Internal baffles and the location of the air jets will induce turbulence into the gases promoting intimate mixing of the combustion products, heat and combustion air.

The gases will reside in these conditions for periods in excess of 2 seconds, when complying with the EU Waste Incineration Directive 76/2000.

The result of this combustion is the efficient reduction of both the partial combustion products (carbon monoxide) and contaminant combustion products (Nitrogen Oxides and Volatile Organic Compounds).

