

SPAN

Leading the way in cremation technology

Gas Based Cremation Incinerators



TECHNICAL FEATURES

Excellent Environmental Performance - emissions conforming World Standards.

Robust Solid Hearth - providing single pass raking for ease of use.

Excellent Extended Hearth Life.

Highest Quality Refractories - comprising fire-brick, backed by calcium silicate and microporous insulating materials. including 63% Alumina in areas of high turbulence in the cremator hearth.

Robust Construction - a design capable of numerous cremations per day with cremation times of 50 to 75 minutes fully achievable.

One Secondary Combustion Zone Burner to ensure a secondary zone temperature of 850°C which can be maintained under all conditions of normal operation.

The casing and framework of the cremator is fabricated of steel plate and sectional steel construction, the whole braced for rigidity, so as to properly support the refractory and insulating materials with which the casing is lined.

Dedicated Programmable Logic Controller to ensure optimum Combustion conditions by continuously monitoring throughout each cremation

Automatic Control of Suction and temperature of both primary and post combustion zones

Automatic Fail Safe against over temperature and pressure. Safety Interlocks automatically shut off gas and air supply valves in the event of flame failure of either the main burner or afterburner, and to prevent burner ignition if the safety circuits are not energised.

Compact Design, Enabling Easy Installation.

Cremation Incinerator General Description

The Cremator comprises a primary chamber of generous proportion into which the body is inserted and within which the primary combustion takes place. The hearth comprises tiles which keep the primary chamber entirely separate from the secondary chamber and avoid by-passing of the flue gases. The hearth itself contains no openings; this ensures that all materials are retained for combustion in the primary chamber. The waste gas produced from this phase of the process exits the primary chamber via transfer ports in the chamber side walls, descending below the solid hearth into the secondary combustion zone in which the gas phase combustion takes place.

The gases enter this zone and are then heated if necessary by the secondary zone burner and treated by the introduction of additional air. The flue gases make numerous passes within the secondary combustion zones where the temperature is maintained at the required combustion temperatures of 850°C such that the two requirements of temperature and Oxygen are met to ensure compliance to the environmental requirements. Feed back to the control system from the emission monitoring equipment ensures close control is always maintained, resulting in low pollutant emissions and excellent fuel economy.

Gas Burners:

Key Specifications:

- **Fuel Compatibility:** Can handle natural gas, LPG, biogas, town gas etc.
- **Temperature Capability:** Designed to reach and maintain high operational temperatures (e.g., >850°C, up to 1600°C) for complete combustion.
- **Control & Automation:**
 - **Modulating/Two-Stage:** For precise air/fuel regulation (e.g., 1:5 turndown ratio).
 - **Safety:** Flame sensors, automatic ignition, pressure regulators, auto shut-off.
 - **Control Panel:** Separate or integrated panels for monitoring and control.
- **Combustion Efficiency:** High efficiency to minimize unburned residue and meet emission standards (e.g., >99.99% combustion).

Emissions: Designed for low NO_x, CO, and particulate emissions, complying with local regulations



SPAN FILLING SYSTEMS PVT. LTD.

C-216, 2nd Floor, Ghatkopar Industrial Estate
Off LBS Marg, Ghatkopar West
Mumbai 400086, India
Tel: 91 22 42151088, 9821160865
info@spanpaksystems.com