The most thermally efficient, robust and reliable animal cremators on the market

Simply Built Better!

MINI 350Kg Animal Pet Cremator
Suitable for: Domestic Animals

One of our smallest low capacity machines within our family of cremators with a top loading design. The Addfield Mini is a 350kg capacity cremator ideal for individual cremation of domestic animals. It has chamber volume of 0.58m³. All of our machines are DEFRA and DARD approved to burn up to 50kg/hr.

Addfield Environmental Systems Limited
Hollies Park | Cannock | Staffordshire | WS11 1DB | UK

t: +44 (0)1543 571280 | f: +44 (0)1543 571173

sales@addfield.co.uk | www.addfield.co.uk

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The pet cremation range is designed as a two stage machine unit comprising of a primary loading chamber and a secondary after burner chamber. This afterburner system draws the hot gases from the primary chamber, this ensures a clean (and compliant) burn at temperatures of 850-1150°C.

The Addfield range of cremators are CE Certified to BS EN 746-2:1997, a recent emissions testing concluded the following results based on two second residue time within the secondary chamber, results are well below the EC limits.

### Expected Emissions* % by Volume

<table>
<thead>
<tr>
<th>Emission</th>
<th>% by Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Dioxide (CO2)</td>
<td>7.4%</td>
</tr>
<tr>
<td>Water (H2O)</td>
<td>22%</td>
</tr>
<tr>
<td>Oxygen (O2)</td>
<td>6%</td>
</tr>
<tr>
<td>Nitrogen (N2)</td>
<td>64.5%</td>
</tr>
<tr>
<td>Smoke</td>
<td>0%</td>
</tr>
<tr>
<td>Odour</td>
<td>0%</td>
</tr>
<tr>
<td>Volume of ash</td>
<td>1-3%</td>
</tr>
</tbody>
</table>

*These emissions are based on minimum waste calorific values 45.7MJ/kg (animal carcass). With no other waste streams present other than general packaging containers that do not make up more than 1.5% of the total load weight.

### Fuel Options:

- Diesel: Yes
- LPG: Yes
- N-Gas: Yes

† Based on general municipal waste streams
* Depending on the type waste stream being loaded and excludes heat up time.

We reserve the right to change the specification, dimensions and quality of materials from time to time, so long as the alteration is minor or an improvement to the said products.
Computational Fluid Dynamically Modelled Incinerators

Key Features:
We have CFD modelled all of our cremators by utilising some of the most advanced software available. By using Computational Fluid Dynamics software it helps us to predict gas velocities /movements within the chambers along with external surface temperatures whatever the external ambient parameters maybe.

We also use this information to develop a more durable, robust and efficient incinerator by:
• Identifying heat build-up and stress points within the structure.
• Reducing thermal heat loss by increasing insulation systems.
• Designing out hot & cold spots to ensure compete combustion within the chamber.

General Construction
Robust, Reliable and Efficient
• Pre-fabricated 8 & 10mm robust mild steel casing, seam welded & suitably stiffened/braced where necessary.
• Paint finishing - The steel structures are completely painted using a two pack high grade paint system that is baked onto the steel structure at 70°C for 10hrs. The standard colour of the series is green for the primary and secondary chambers, lid, flue and counter balance.
• Three layers of refractory lining in the primary & secondary chambers totalling thickness of 180mm, rated at 1260°C, provide increased fuel efficiency.
• Lightweight resilient refractory fibre insulation lid, providing a tight seal & gives excellent thermal efficiency.
• Removable roof and back plate for ease of maintenance.
• All combustion fuel pipe work and electrical systems are weather proof and in accordance with BS7671-17.
• As an optional extra, an excess air and rapid cooling systems can be fitted, aiding cleaner burns and faster cool down times.

Primary Chamber
• Fully insulated internal refractory lining, constructed from high grade refractory brick ensuring a self-supporting interlocked arrangement.
• One manually operated, access lid
• One waste ignition burner, temperature controlled on-off, complete with internal air fans
• A pre-cast block impact zone, that protects the refractory lining when loading.

Secondary Chamber
• Fully insulated internal refractory lining, constructed from high grade low thermal mass insulation.
• One secondary chamber burnout burner, temperature controlled on-off, complete with internal air fans
• Integrated combustion burner air fans with automatically controlled distribution to their designated area.
• One temperature sensor mounting point at the top of the chamber ensuring the chamber reaches the necessary 850°C minimum.
Waste Loading and De-Ashing
The pet cremation series of machines are designed for top loading only through the main access door.

At the end of every cremation process it is recommended the ash should be removed prior to the next cremation cycle. In the UK regulatory requirements insist on sheep and cattle ash to be separated from other waste.

Waste types to be used in the Addfield MINI Cremator
- Cats
- Dogs
- Rabbits
- Guinea Pigs

Combustion System
The burner system comprises of fully automatic package burners, these burners come complete with the following features:
- Flame failure controls
- Adjustable flame patterns
- Integral fuel pump
- Solenoid valves
- Integral continuous air fan
- Fuel sensors