

i8-700 Animal Incinerator

The i8-700A is one of our largest models and boasts a wide array of features many unique to the i8 range. Developed over the last 3 years the i8-700A is at the fore-front of combustion technology and offers impressive burn rates and large batch sizes while still achieving some of the lowest emissions in its class.



Remote Monitoring & Pro-active Analysis (optional extra) Data can be fed back to our HQ where our team of engineers can monitor and provide advice when required on optimum operation of your incinerator.

It also allows us to advise when your service is due to ensure longevity of the unit.



Industry Leading Insulation Coretex© insulation is a specially formulated substrate containing various levels of material that ensure almost all of the heat generated within our incinerators stays inside them.

This increases performance and efficiency to another level.



Long Lasting Construction All our larger incinerators are constructed from British made high quality 6mm mild steel plate.

They are fully welded for maximum strength by our time-served coded welders. Meaning you get years of trouble-free operation.



**Designed to excel** Each of our incinerators has been tested to exacting standards ensuring they meet our strict guidelines.

This machine can reach in excess of 850°C in the secondary chamber and also retains the gases for the 2 seconds required.



Designed to burn a wide range of animal waste in larger batches. It can be fitted with an optional auto-loader and a variety of pollution control systems.

Our versatile range of animal incinerators are designed for a wide variety of waste types. This is our flagship model which benefits from a top loading design and features the latest in operator safety and performance. This model can also use our enhanced control panel technology for remote monitoring\*.







- Cladded for heat retention, cool touch & hygiene control
- Rapid, complete and efficient medical waste disposal
- Patented safety handle for easy access to chamber
- High quality refractory lining and insulation
- Easy to use CE7 control panel
- Programmable temperature control for complete combustion
- Secondary chamber\*\* with 2 second retention time
- Fast pre-heat and continual high temperature performance
- Low energy consumption levels
- \* Enhanced control panels are an optional extra and incur additional charges. \*\* Our primary combustion chambers are constructed from high grade steel and monolithic refractory lining with a unique concave design to prevent cold spots.

The design ensures a natural secondary burn characteristic as when the burner is switched on a flame curtain is created, this ensures the thermal breakdown of smoke/emissions, where in many instances emissions will exit through the stack and into the atmosphere in the form of clean vapor.



For additional information, or to speak to one of our expert team:

Call +44 (0) 1704 884020



# **Key Parts of our Incinerator**

#### **1** 5 Zone HT Thermocouple

Allow independent control of primary and secondary temperatures via the control panel.

#### 2 Primary Chamber

Chamber designed for maximum air flow and circulation which in turn improves efficiency and total burn time.

**3** Low NOx Burners

These are some of the cleanest, most efficient burners available today. These can be supplied as gas or oil fired.

#### 4 Chimney Stack

Stainless steel stack for longevity. Minimum 3m stack height required. Fitted with dispersion cap as standard.

#### 5 Secondary Chamber

Retains and re-burns the exhaust gases for minimum of 2 seconds at  $850^{\circ}$ C to meet EU guidelines.

#### 6 Key man Safety Features

Kill switches and safety cords fitted as standard Clear fault alarms and indicators around the machine..

#### 7 Ash door

All models now feature a 'floating' ash door design that is rigid and can be opened safely during operation.

### How incineration works:

Incineration is a waste treatment process that involves the combustion of organic substances contained in waste materials. Incineration and other high-temperature waste treatment systems are described as "thermal treatment". incineration of waste materials converts the waste into ash, flue gas and heat.

The ash is mostly formed by the inorganic constituents of the waste and may take the form of solid lumps or powder. In some cases, the heat generated by incineration can be used to generate electric power.

### Applications

Our versatile range of animal incinerators are designed for a wide range of waste types<sup>\*</sup>. This particular model benefits from a top loading design and very simple operation process. Ideal as a stand-alone machine.

- All forms of animal by-products
- Soiled animal bedding
- Pet cremation
- Out of date / cross contaminated feeds
- Large slaughterhouse/abattoir waste
- Large Poultry / Broiler Farms





\* Incinerators that are used to burn only animal carcasses or parts of carcasses, ie no other waste or animal by-products, are exempt from many of the more complicated requirements of the regulations. They must still be approved by the farm's local authority, however.

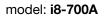


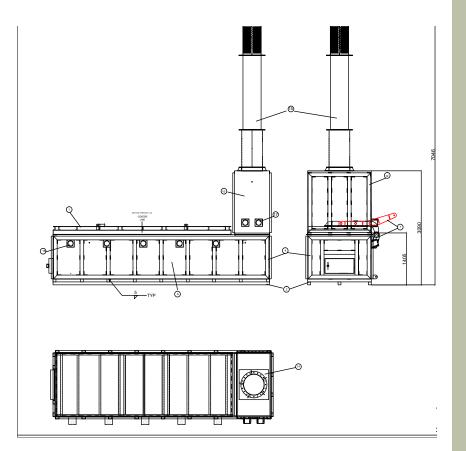
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model: i8-700A







Incinerator Specification	
Combustion Chamber Volume (m3)	6.75m³
Metal Thickness	4mm
Burn Rate**	up to 800kg per hour
Operational Temperature	850°C
Gas Retention	2 seconds
Average Ash Residue (%)	3%
Thermostatic Device(s)	yes (x7)
Shipping Weight (kg)	15000kg
Dimensions (I, w, h)	6.04m x 1.91m x 5.75m
Door Size	4.58m x 1.50m
Fuel Consumption	40 - 50 ltrs per hour
Fuel Types	Light Oil, Diesel, Kerosene, Gas, LPG
Max Sound Output (dB)	65 dB
Max Electrical Consumption (kWh)	0.115kW

#### \*\* PLEASE NOTE:

Actual burn rates & emissions will depend on a number of factors including waste type, volume of waste, moisture content, fuel used and local environmental conditions.

### Average emissions / EU standards\*

\*The above figures are guidelines ONLY.

Parameter (1/2 hr av)	Limits	Measured
Total dust	30 mg/m <sup>3</sup>	12 mg/m <sup>3</sup>
Sulphur dioxide	200 mg/m <sup>3</sup>	2.4 mg/m <sup>3</sup>
Nitrogen dioxide	400 mg/m <sup>3</sup>	60 mg/m³
Carbon monoxide	100 mg/m³	78.3 mg/m <sup>3</sup>

All our incinerators' chambers are lined with high grade refractory concrete rated to 1600°C. Our secondary chamber technology prevents dioxins from cracking into smaller but more reactive molecules, this is known as de novo formation.

This can be especially apparent in the presence of heavy metals, which can act as a catalyst.

The prevention method can be explained as follows: system design forces the micro particulates to pass through a flame curtain, this burns harmful emissions, gas remnants are then retained in the secondary chamber, through thermal decomposition, and complex, controlled air distribution to ensure a clean odourless emission.

# Burner Specification:

This model is fitted with 2 burners (2 x MAX 8 TC) as standard to ensure a complete and clean burn cycle. Ecoflam products ensure high efficiency and reliable operation combined with functional features that reduce installation time and maintenance and grant a flexible boiler/burner matching.



- MAX 1-12 have electrical frequency 50-60 Hz
- High efficiency fan ventilation system (HPV)
   Low NOx version close 2 with vellow fame
- Low NOx version class 3 with yellow flame
  Designed in compliance with current regulations
- ISO 9001 and VISION 2000 certification
- All burners are fire tested

NB: picture for illustration purposes only



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# **Site Preparation**

### Groundwork required

Step 1 Mark out area for base and reinforce with steel mesh.







Assemble incinerator shelter on concrete base once

Step 3

fully dried.

# **Site Options**



Replace the material at a depth of at least 50cm

Concrete floor is preferred for installation, this should be solid and levelled.

Apply gravel and compact to the compressibility modulus M = 80.0 MN/m2.

All fuel and electrical installations should be done according to local regulations.

If you construct a new base then a reinforced concrete slab 20cm thick is recommended.

A basic shelter is required to protect the incinerator and the control panel from the weather.

### Sheltered

Ideal weather protection for equipment and operator. Our shelters are designed for easy and quick installation on a standard reinforced concrete slab.

Certain regions require some sort of shelter from adverse weather conditions or localised problems. Our products are used in diverse locations from the freezing camps of Antarctica to sweltering temperatures of Sierra Leone.



### Containerised

Containerisation is the most feasible and viable option in contrast to the construction of on-site facilities and housing structures, eliminating the man power and costs involved.

The units arrive complete with electrical power generators and fuel tank (further customization available to suit all needs). The system is available in 10ft, 20ft, and 40ft containers, depending optional requirements.



### Trailer-mounted

The trailer is rated to carry up to 2700kg , therefore there is plenty of additional space to carry extra items of equipment including generator sets, fuel and any other equipment.

Chassis, framework and panels are galvanized for maximum durability.

The beam axle system features sealed, specialised wheel bearings and powerful auto-reverse brakes and is unequalled for strength and durability.

If you are considering a mobile option its worth bearing in mind that we can supply and install all the required accessories prior to dispatch - such as generators, lighting, power sockets, fuel tanks and piping. This allows rapid deployment of your mobile unit to where it is needed most.



All containers supplied are ISO 6346 certified, so they can be used for the shipping and housing of incinerators and any other related equipment.



For additional information, or to speak to one of our expert team:





## **Heat Exchanger**



Get something back from your waste with our range of heat exchange modules. Inciner8 have found the optimal way to create energy from waste and make it usable whether you need it for washing, disinfection, heating, or for your specific technological process.

# Venturi Scrubber



A venturi scrubber is designed to effectively use the energy from the inlet gas stream to atomize the liquid being used to scrub the gas stream. This type of technology is a part of the group of air pollution controls collectively referred to as wet scrubbers.

### Auto Loaders



These allow continuous operation, improve fuel efficiency and can be used in conjunction with a hopper or conveyor to keep your waste processing running with little human intervention.

### **Emissions Monitoring**



In certain situations you will require emissions monitoring. We offer a range of options to match your needs. Our recommended solution is totally portable and gives you an instant insight into the composition of your exhaust gases.

# **Annual Spare Parts Package**



Your incinerator will last for years if properly looked after and maintained. The simplest way to help it last is to maintain and inspect the machine on regular intervals. Annual service packs vary from machine to machine, but typically consist of: new burners, fire rope, fireproof mastic and refractory cement.

# Additional Services



# Rewiring / Electrical Repairs

Our Engineers are fully trained to rewire any machine along with fault finding and electrical testing.



# Insulation & Refractory Repairs

Due to the design of our refractories, it is very easy to repair these on-site. IN most cases this can be done by a competent operator. However we can easily send an engineer if you do not feel comfortable doing this yourself.

We can also supply complete replacement loading doors, de-ashing door fully concreted and insulated.



# Welding, Fabrication & Repairs

Our teams of time-served fabricators can repair or modify your incinerator on-site or back at our factory.

In some regions we offer local fabrication services using local welders and engineers.

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# Annual Services & Maintenance

Inciner8 are experienced in servicing and repairing most makes of incinerator.

After a successful service, you will be issued with a servicing certificate that lasts for 12 months from the date of the service.



For additional information, or to speak to one of our expert team:

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# **Accessories and Service Packs**

## **Operators PPE Kit**



In most countries you are required by law to wear appropriate PPE equipment when operating machinery and/or handling hazardous or bio-hazardous waste.

Our operators kit contains a heavy duty, fire resistant apron, gauntlets and a face visor.

## **Bin Tipper - Mega Dumper**



The megadumper is available in a number of sizes and is our preferred method for loading industry standard waste bins into our incinerators. Fully automated, just roll the bin into position and let the megadumper do the rest.

# **Customised loading options**



If you have larger single items to load - for example larger animal carcasses (cows, camels, horses) we can design and build a bespoke solution<sup>\*\*\*</sup> to meet your needs.

## Fuel Tank & Piping Kit



All our incinerators come supplied with burners that have been configured for your chosen fuel type.

We supply a wide range of fuel tanks from 350 litres to 2500 litres and, quality steel braided flexible pipes to allow most kinds of installation.

## **Pollution Control Systems**



Pollution control systems capture all the gasses, soot and entrained solids emitted by the incinerators and processes them to meet the European regulations, which are set out in directive 2000/76/EC, dated 4th Dec 2000. Various sizes and capacities are available.

# **Pre-Fabricated Shelter**



We can provide pre-fabricated shelters constructed from galvanised steel. These come flat packed and require no skills to assemble within just 1 hour.

All incinerators should be on a solid concrete base.

\*bespoke solutions incur additional charges for design and engineering work, please speak to your sales agent.



For additional information, or to speak to one of our expert team:

Call +44 (0) 1704 884020 Email sales@inciner8.com

### Looking after your incinerator

Our incinerators are built to last, however unless they are protected from the elements they will not last as long.

Here's 5 simple steps to ensure your INCINER8 incinerator lasts for many years

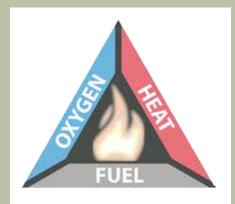
- 1). Put it in a suitable shelter.
- 2). Check for damage before each use
- 3). Service every 1000 hours\*
- 4). Do not overload the chamber
- 5). There's enough fuel for burn cycle

\*All our products have a 1 year / 1000 hour warranty (Whichever occurs soonest).

### Achieving optimal combustion\*\*

The basic principle of incineration is based on the combustion triangle.

For optimal combustion to occur the perfect mixture of the 3 core elements is required\*



Oxygen	in waste, from burners
Heat	from primary chamber, burners
Fuel	the waste being burnt

If your waste (fuel) has a high calorific value then less heat will be required to ensure good combustion. If your waste is very dense or compact, then you may need to introduce more oxygen.

Getting this balance right will ensure optimum combustion.

\*\*Optimum combustion requires a uniform and regular flow of waste with a good calorific value. Atmospheric conditions and waste composition can effect advertised burn rates.





# CE DECLARATION.

### MACHINE LISTED BELOW HAS BEEN TESTED BY MANUFACTURER IN FACTORY BEFORE DISPATCH

PRODUCTION DATE: 2018 CONFORMS TO ALL SAFETY NORMS WHEN USED ACCORDINGLY "CE DECLARATION OF CONFORMITY" "CE DECLARATION DE CONFORMITE" "CE DECLARACION OF CONFORMIDAD" "CE ATTESTATO DI CONFORMITA" "EG- KONFORM IT A TSERKLARUNG"

# INCINER8 LTD, UNIT 2, CANNING ROAD INDUSTRIAL ESTATE, CANNING ROAD, SOUTHPORT PR9 7SN, UNITED KINGDOM

Has declared that the machinery described: Declares que les machines descrits: Declaramos que la maquinaria descrita: Dichiara che la macchina di seguito descrito: Bestatigt daB die hierunter beschreibt Maschine: Model (Modele; Modelo; Modello; Modell) :

# CE INCINERATOR I8-700 C/W Eco Flam Burners

Serial Number (Numero de Serie; Numero de Fabricacion; Numero di Serie; Registriernummer) : INCIN8(ABP)845 Conforms to the following directives: Est conforme aux Directives suiventes: Es conforme a las Directivas seguientes: E conforme alle disposizioni contenute nelle seguenti direttive: Ist gemaB folgenden Richtlinien hergestellt worden:

### 1.BS EN 746-2:1997

(industrial thermoprocessing equipment - part 2. Safety requirements for combustion and handling systems)

### 2.Low Voltage Directive 73/23/EEC

Directive Basse Tension Directive Baja Tension Direttiva Sulla Bassa Tensione Niedrige Sapnnung – Richtlinie Diretivas

#### 3.EMC Compatibility Regulation 89/336/EEC

Directive CEM Directiva CEM Direttiva Compatibilita Elettromagnetica Elektromanetische Vereinbarkeit – Richtlinie Directive EMC

### 4. Machinery Directive 2006/42/EC (including amendment)

Directive Securite Machines Directiva Seguridad Maquinas Direttiva Macchine Maschinen – Richtlinie Directiva De Maquinario

#### 5. (EC) No 1005/2009 on substances that deplete the ozone layer

CE





Manufacturers Declaration Regarding the Compliance of an Incinerator with Annex III of The Animal By-Products Regulations (EU) No. 142/2011

We **INCINER8 LIMITED** HEREBY CERTIFY that (make, model of incinerator) meets the operating requirements set out in Annex III Section 2 of Regulation (EU) No. 142/2011 implementing Regulation (EC) No. 1069/2009 and the provisions of The Animal By-Products (Enforcement) (England) Regulations 2013/The Animal By-Products (Enforcement) (Scotland) Regulations 2013/The Animal By-Products (Enforcement) (Scotland) Regulations 2013/The Animal By-Products (Enforcement) (Scotland) Regulations 2013/The Animal By-Products (Enforcement) (Vales) Regulations 2014, as a (Low Capacity or High Capacity) Incinerator compliant with the requirement to raise the temperature of the resultant gas to either 850°C for 2 seconds or 1100°C for 0.2 seconds\* provided that:

1. The Incinerator is operated only with the burners specified below and set at the ratings and/or fuel flow and air settings specified and/or set by the Manufacturers.

2. No alteration is made to the Incinerator flows and inputs.

3. The Incinerator is operated at all times in accordance with the Manufacturer's Operating Instructions.4. The Incinerator undergoes such annual servicing as specified in the Manufacturer's Operating Instructions. Servicing is to be carried out by the Manufacturer or a suitably qualified and certified Engineer.

5. The temperature measuring equipment and any temperature recording equipment fitted to the Incinerator shall be maintained in proper working order and shall be re-calibrated as specified by the manufacturer. Re-calibration shall be carried out in accordance with instructions contained in the Operating Instructions and to a recognised standard (e.g. UKAS).

6. In the event of damage to or malfunction of any part of the equipment including one or more burners or any part of the temperature monitoring equipment, the Operator shall immediately report this to the Manufacturer and follow the instructions of the Manufacturer to rectify the matter to ensure that the Incinerator operates in accordance with its design specification.

Company Name: Make and model of incinerator: Make and model of burner: Type of burner: INCINER8 LIMITED i8-700 MAX 25 Oil



### **Award Winning Team**

Here at INCINER8 we see awards as great recognition for the hard work and effort we put in to every order we fulfil. We constantly remind our team that if you work hard and provide excellent customer service you will be recognised.

Over the years we have been privileged to win awards, both regionally, nationally and internationally - and long may it continue.





For additional information, or to speak to one of our expert team:

Call +44 (0) 1704 884020



INCINER8 Ltd is one of the largest suppliers of incinerators throughout the world. Manufacturing in a factory in Southport and shipping out products all over the world through our dedicated sales team & Global Dealership Network.



An experienced team of researchers, designers and engineers have made INCINER8 an innovator in the waste incinerator sector, achieving two Queens Awards and many regional business awards. Our hand engineered machines can process municipal, medical and animal waste streams, providing the best solutions to waste problems around the world.







# Sales / Head Office

Inciner8 International 2 Canning Rd Industrial Estate Southport Merseyside PR9 7SN

Phone: +44 (0) 1704 884020 Email: enquiries@inciner8.com

## Dealerships

If you would like to become part of our dealership network, please get in touch:

Phone: +44 (0) 1704 884020 Email: dealers@inciner8.com

# **Technical Support**

We have a wealth of information regarding our machines, waste disposal best practice and waste composition on our website.

Phone: +44 (0) 1704 884020 Email: techsupport@inciner8.com















