





# TECHNICAL INTRODUCTION

18-M80 incinerator is a controlled air incinerator, providing optimal combustion conditions for all different types of medical waste. The front-loading design provides excellent liquid retention. The i8-M80 is a medium capacity specialist "M" incinerator for medical waste disposal benefiting from cylindrical combustion chambers, integrated I.D. fan and clinical exterior design making it the ideal solution for hospitals and medical waste collection centres. The M80 is best suited to the combustion of medical, clinical, pharmaceutical, pathological and hazardous waste streams. This unit also benefits from a secondary chamber with a gas residence afterburner to eliminate harmful emissions.



# **LOAD CAPACITY**

Inciner8 uses four main size guides within our comprehensive range to differentiate our models, from S to XL, This allows us to provide you with a machine that perfectly fits your needs and your waste stream.



#### **CORETEX INSULATION**

Coretex insulation - Triple insulation Coretex technology uses a combination of high-density insulation board, custom refractory concrete and thick steel to deliver the ultimate incineration insulation.



#### **MISTRAL TECHNOLOGY**

Our Mistral technology provides variable airflow for when you need to adjust combustion for harder to incinerate waste. Additional airflow gives the combustion chamber more oxygen when it needs it for an unbeatable efficiency and increased incinerating potential.



#### **FRONT LOAD**

Front-loading increases accessibility and ease of use for manual handling and is ideal for the medical and pet cremation sectors. It allows ash to be easily and carefully removed and makes the overall accessibility into the primary chamber easier for the operator.



# **CONTAINER CONFIGURE**

Certain Incinerators have the capability to be configured into mobile containerised incineration units. This gives them the benefit of being easy to lock up and secure when at a remote site, as well as being easier to move with added benefits of minimal setup and dismantling time.

Our medical incinerators are designed to burn Type I - IV pathological waste, infectious, contaminated "red bag," surgical dressings, plastic test devices and other wastes. If you are paying a high fee to haul these waste materials to a disposal site, now is the time to consider the onsite Incineration alternative. On-site incineration is a thorough, fast, and cost effective way to dispose of waste. Our various models are engineered to meet strict air emission regulations without offensive smoke or odour.



# **i8-M80 FEATURES**

- Steel cladding for maximum heat retention
- Self-contained fuel tank
- Cool touch and hygiene control
- Rapid, complete and efficient medical waste disposal
- Safe use handle
- High quality refractory lining and insulation
- Integrated CE2 control panel
- Dual Temperature monitoring
- Fast pre-heat and continual high temperature performance

<sup>\*</sup> Our primary and secondary combustion chambers are constructed from superior grade steel and state-of-the-art monolithic concrete refractory with a unique concave design to prevent cold spots and maximize heat retention during the start-up and combustion processes. When the secondary burner is activated a flame curtain is created which ensures the thermal decomposition of smoke and harmful emissions to produce a clean, odourless vapour exiting the chimney stack.



model: **i8-M80** 

# TECHNICAL BREAKDOWN

# model: **i8-M80**

# **HT THERMOCOUPLES**

Independent control of primary and secondary temperatures via the control panel.

# **SECONDARY CHAMBER**

Retains and re-burns the exhaust gases for minimum of 2 seconds at 850°C.

# **CHIMNEY STACK**

Stainless steel stack for longevity. Fitted with a Velocity Cowl as standard.

# PRIMARY CHAMBER

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

# **SAFE USE HANDLES**

Easy to open and close loading door. Designed to increase operator safety.

# **COOL TOUCH CLADDING**

Steel cladding to reduce risk of infection and increase longevity of system.

# LOW NOX BURNERS

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



"Photos are for illustration purposes only. Specification (including paint colours) are subject to change without notice and do not affect the performance of the machine.

# **HOW INCINERATION WORKS**

Incineration is a waste treatment process which utilizes the combustion of organic substances contained within materials to convert waste into ash, heat and flue gas. The ash residue is mostly formed by inorganic constituents of the waste which may take the form of solid lumps or powder.

Heat produced by the incineration process can be fed into a heat exchanger to produce hot water or air which can be used for cleaning or heating purposes. The remaining flue gases are passed through pollution control devices in the form of a secondary combustion chamber or additional filtration (if required) and then expelled to atmosphere.

# **APPLICATIONS**

Our versatile range of medical incinerators are designed for a wide range of waste types. This particular model benefits from a front loading design and very simple operation process. Ideal as a stand-alone machine where limited staff are available to operate.

- Type I -IV pthological waste
- Infectious and contaminated 'red bag'
- Surgical dressings
- Plastic testing devices & equipment
- Vials & syringes
- Yellow bags
- Bandages and gauzes
- Covid PPE waste
- Out of date pharmaceutical waste





model: i8-M80

OPERATIONAL SPEC		PHYSICAL SPEC	
	2 == 2		
Combustion Chamber Volume (m³)	$0.57 \text{m}^3$	Assembled L/W/H (mm)	2080 x 1100 x 3840
Burn Rate (Kg p/h)	Up to 70Kg	Assembled Weight (Kg)	2500kg
Fuel Consumption (Ltrs p/hour)	15-20ltrs	Door Size (mm)	0.57Ø
Time To Temp	45-60 mins	Thermocouples (Qty)	2
Gas retention Time (Seconds)	2 secs	Steel Thickness (mm)	3mm
Loading Method	FRONT Load	No. Of Burners	2
Fuel Options	Light Oil or Gas/LPG	Refractory Composition	Coretex
Electricity Supply	110v or 230v	Operating Footprint	20.83m²
Control Panel (IP Rating)	IP54	Cool Touch Cladding	Yes
Heat Recovery	No	Viewing Portal	No
Auto Ash Removal	No	Tertiary Air Fan	Yes
Auto Loader Compatible	No		*The above figures are guidelines ONLY.
Remote Monitoring	No		
Ash Residue	3-5%		
Recommended Operational Temperature	850 - 1200°C		

Ecoflam burners are renowned worldwide for providing high efficiency and reliable operation with significant energy savings and feature extreme ease of installation, maintenance and flexible boiler-burner matching. This model is fitted with low NOx burners as standard to ensure a complete and clean burn cycle, this reduces installation time and maintenance.

# **ECOFLAM BURNER SPECIFICATIONS**

PARAMETER (1/2 HR AV)	LIMITS	MEASURED*
Total Dust	30mg/m <sup>3</sup>	12mg/m <sup>3</sup>
Sulphur Dioxide	200mg/m <sup>3</sup>	$2.4 \text{mg/m}^3$
Nitrogen Dioxide	400mg/m <sup>3</sup>	60mg/m <sup>3</sup>
Carbon Monoxide	100mg/m <sup>3</sup>	78.3mg/m <sup>3</sup>

\*The above figures are guidelines ONLY.

# **Ecoflam**

- MAX 1-12 have electrical frequency 50-60 Hz
- High efficiency fan ventilation system (HPV)
- 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



# **AVERAGE EMISSIONS / EU STANDARDS**

All of our secondary combustion chambers are designed to operate at 850 - 1200°C to re-burn waste gases which prevents smoke, odours and harmful emissions. Dioxins and similar gaseous components are destroyed by a combination of homogeneous high temperatures, excess oxygen levels and sufficient gas residence time in the secondary chamber which our incinerators achieve.

Emissions are largely a product of the waste materials therefore care should be taken when selecting the most appropriate method of pollution control to ensure compliance with your local emissions standards, please discuss this with our sales team if you aren't sure.

# CALL INCINER8 AND START BUILDING SOLUTIONS TO YOUR WASTE CHALLENGES TODAY! +44 (0) 1704 884020 OR EMAIL SALES@INCINER8.COM

