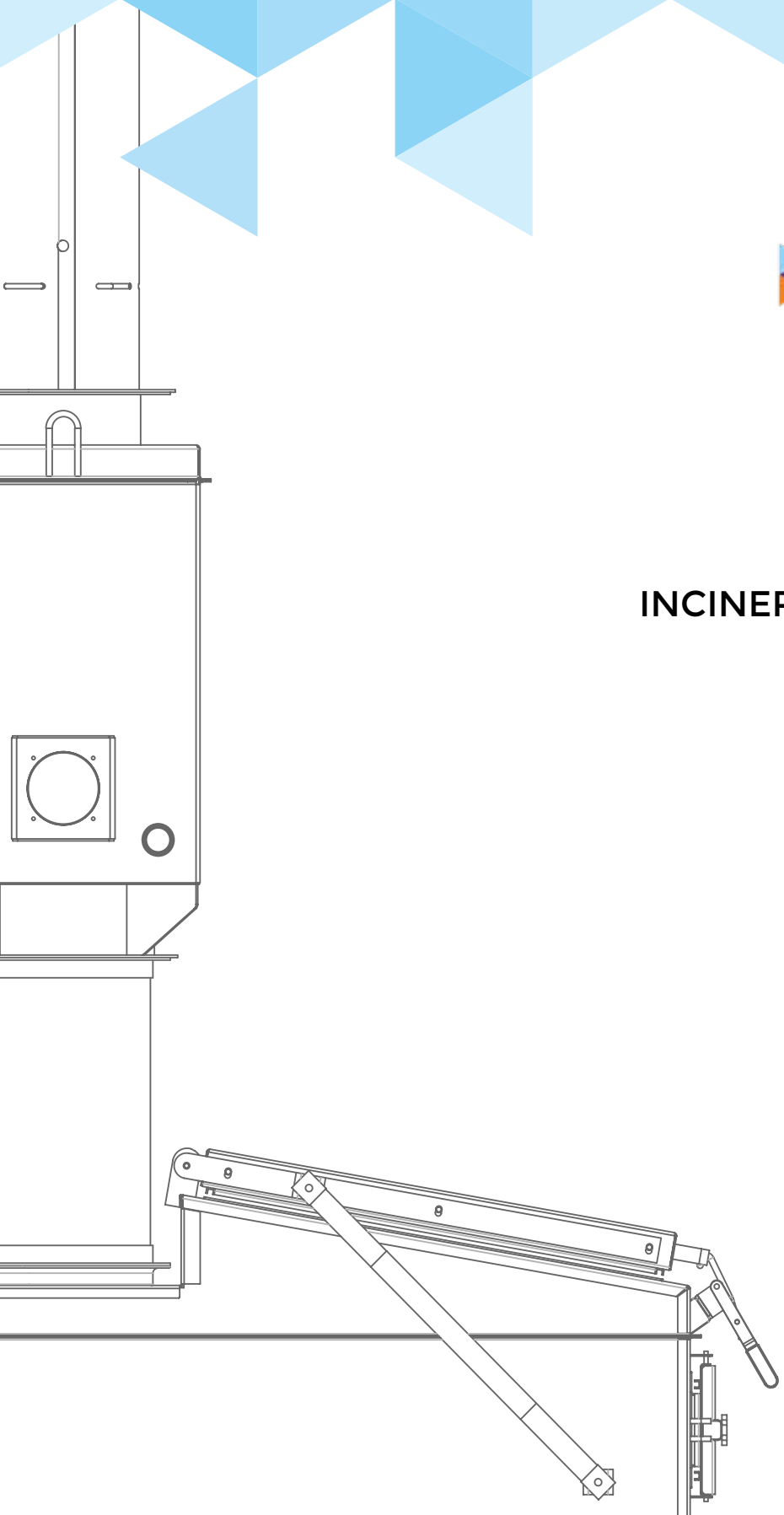
INCINER8

IBS GROUPE
Turnkey Supplier

INCINER8 I8-M70 TECHNICAL DATASHEET



TECHNICAL INTRODUCTION

model: **i8-M70**

Using the same design principles from the popular i8-M50, the i8-M70 has been optimized to deliver a large primary chamber for all types of medical waste disposal. The addition of an enhanced CE2-VFD control panel, tertiary air fan and increased insulation improves performance and provides all-round suitability for many different types of medical, clinical, pharmaceutical and hazardous waste streams. You get controlled air incineration, providing optimal combustion conditions for different waste types.

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.

TOP LOAD

Top loading allows the waste to be dumped in from above making it easy to access for trucks and machinery. It also allows additional extras such as bin tippers and autoloaders to be used within the operation to improve efficiency and incineration times.

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.

TRAILER CONFIGURE

Some of our smaller incinerators can be configured onto trailers. These trailers are country-specific and can be tailored to your needs. This allows extreme portability and can be moved to different locations with very minimal setup time, perfect for constantly moving operations.

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 models are engineered to meet strict air emission regulations without offensive smoke or odour.

i8-M70 FEATURES

- 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 CE2 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

* 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.

TECHNICAL BREAKDOWN

model: **i8-M70**

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.

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

TECHNICAL SPECIFICATION

model: **i8-M70**

OPERATIONAL SPEC

Combustion Chamber Volume (m^3)	0.75m^3
Burn Rate (Kg p/h)	Up to 50Kg
Fuel Consumption (Ltrs p/hour)	10-15ltrs
Time To Temp	45-60 mins
Gas retention Time (Seconds)	2 secs
Loading Method	TOP Load
Fuel Options	Light Oil or Gas/LPG
Electricity Supply	110v or 230v
Control Panel (IP Rating)	IP54
Heat Recovery	Yes
Auto Ash Removal	No
Auto Loader Compatible	No
Remote Monitoring	No
Ash Residue	3-5%
Recommended Operational Temperature	850 - 1200°C

PHYSICAL SPEC

Assembled L/W/H (mm)	2300 x 1600 x 4680
Assembled Weight (Kg)	3300kg
Door Size (mm)	720 x 830mm
Thermocouples (Qty)	2
Steel Thickness (mm)	3mm
No. Of Burners	2
Refractory Composition	Coretex
Operating Footprint	24.38m^2
Cool Touch Cladding	Yes
Viewing Portal	No
Tertiary Air Fan	Yes

*The above figures are guidelines ONLY.

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^3	12mg/m^3
Sulphur Dioxide	200mg/m^3	2.4mg/m^3
Nitrogen Dioxide	400mg/m^3	60mg/m^3
Carbon Monoxide	100mg/m^3	78.3mg/m^3

**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.

IBSGROUPE LTD – N°13674259. Siège: 27, Old Gloucester Street, LONDON, WC1N 3AX, (UK)- Phone. +44 20 3398 1339
Dépôt: 15 rue de la Garenne 27950 Saint-Marcel (France) – Tél. +33 9 82 12 62 71 – dircom@ibsgroupe.com