INCINER8

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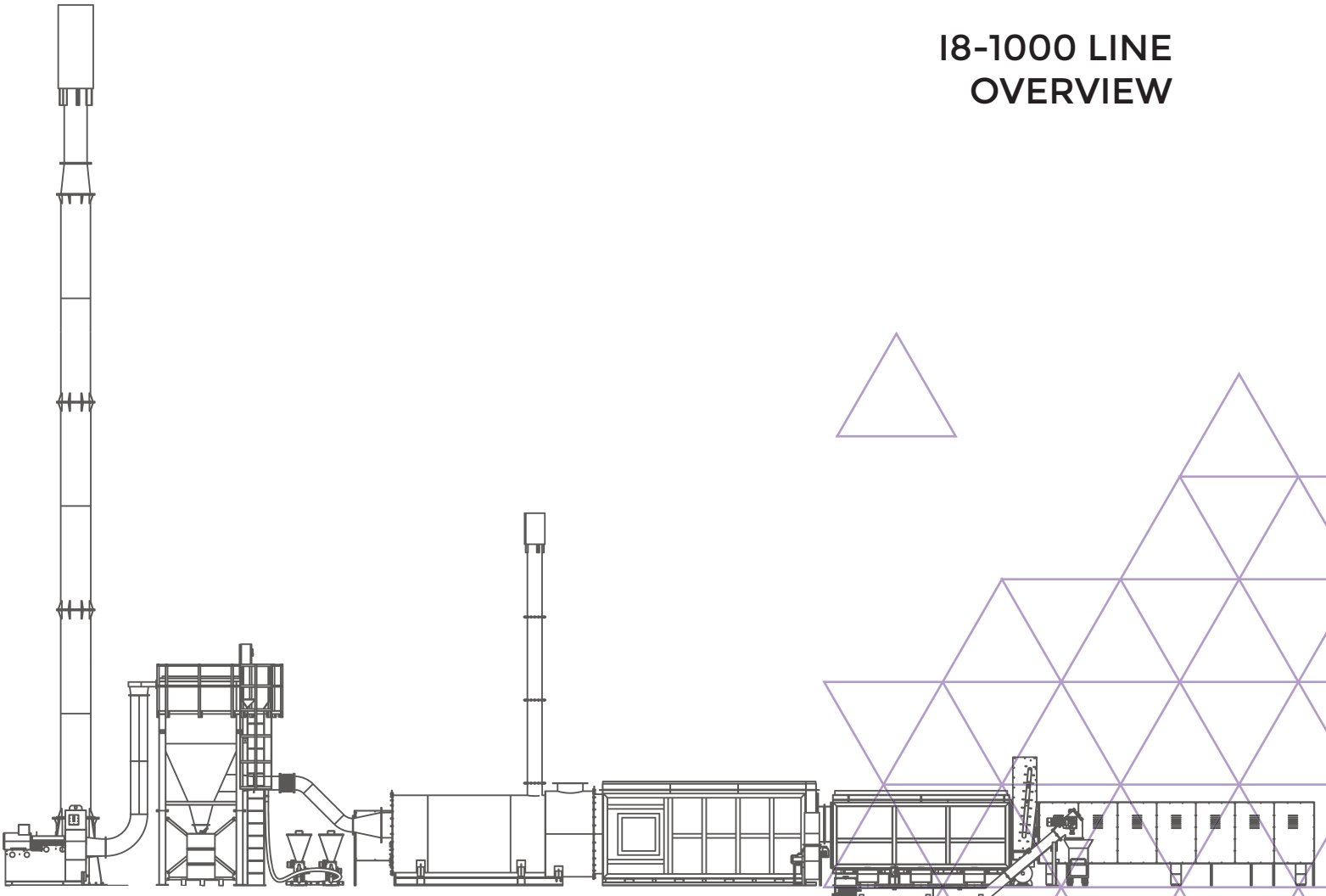
I8-1000 LINE OVERVIEW



OVERVIEW

model: **i8-1000 line**

The flagship model is the i8-1000 line. It took over three years to develop and is at the forefront of combustion technology, offering impressive burn rates and large batch sizes while still achieving some of the lowest emissions in its class. The i8-1000 can be customised with external cladding and automatic loading/de-ash to provide an effective and sustainable waste disposal solution for many different types of industries processing large volumes of waste. It also benefits from smartpanel remote monitoring technology allowing operators to view the performance and live dashboards from anywhere in the world.

LOAD CAPACITY

Inciner8 uses four size guides within our range to differentiate our models, S, M, L and XL. This allows us to provide the optimum and most efficient solution for your waste stream.

CORETEX INSULATION

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

TOP LOAD

Top loading is the moste efficient method for loading waste and allows operators to use trucks and other machinery to improve the overall efficientcy of processing waste. It also allows additional extras such as bin tippers and autoloaders to be used within the operation to improve efficiency and incineration times.

SMARTPANEL REMOTE MONITORING

Smartpanel Remote Monitoring is an optional feature that allows authorised users to login and view the HMI control screens and histrorical data from any location worldwide. This feature also enables our technical support team to provide detailed troubleshooting assistance throughout the warranty period,

HYDRAULIC DOOR

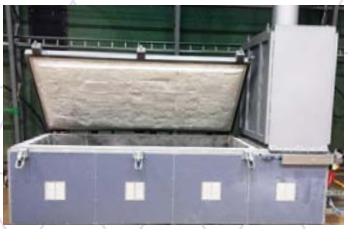
The i8-1000 model includes a heavy-duty steel hydraulic door to priovide safe and effortless loading throughout operation. The door is controlled from the central control panel making light work of continuous loading.

Designed and manufactured in Britain to ISO 9001 accredited quality assurance standards. Our machines are used for processing large volumes of waste across a wide range of sectors around the world, including medical waste, municipal waste management, manufacturing, mining, and hospitality, as well as tackling serious waste management challenges, including controlled drug disposal, humanitarian response and marine waste.

ISO 9001 CERTIFICATION

UKAS MANAGEMENT SYSTEMS 0060

MADE IN BRITAIN



i8-1000 FEATURES

- Fully insulated chamber to retain heat and improve combustion
- Rapid, complete and efficient waste sterilisation and destruction
- High quality refractory lining with enhanced CoreTex insulation
- Semi-automatic controls via user-friendly touch screen HMI display
- Programmable temperature control for complete combustion
- 1200°C secondary chamber with 2 second gas 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 concrete refractory with a unique 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.

For additional information, or to speak to one of our experts:

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+44 (0) 1704 884020

Email
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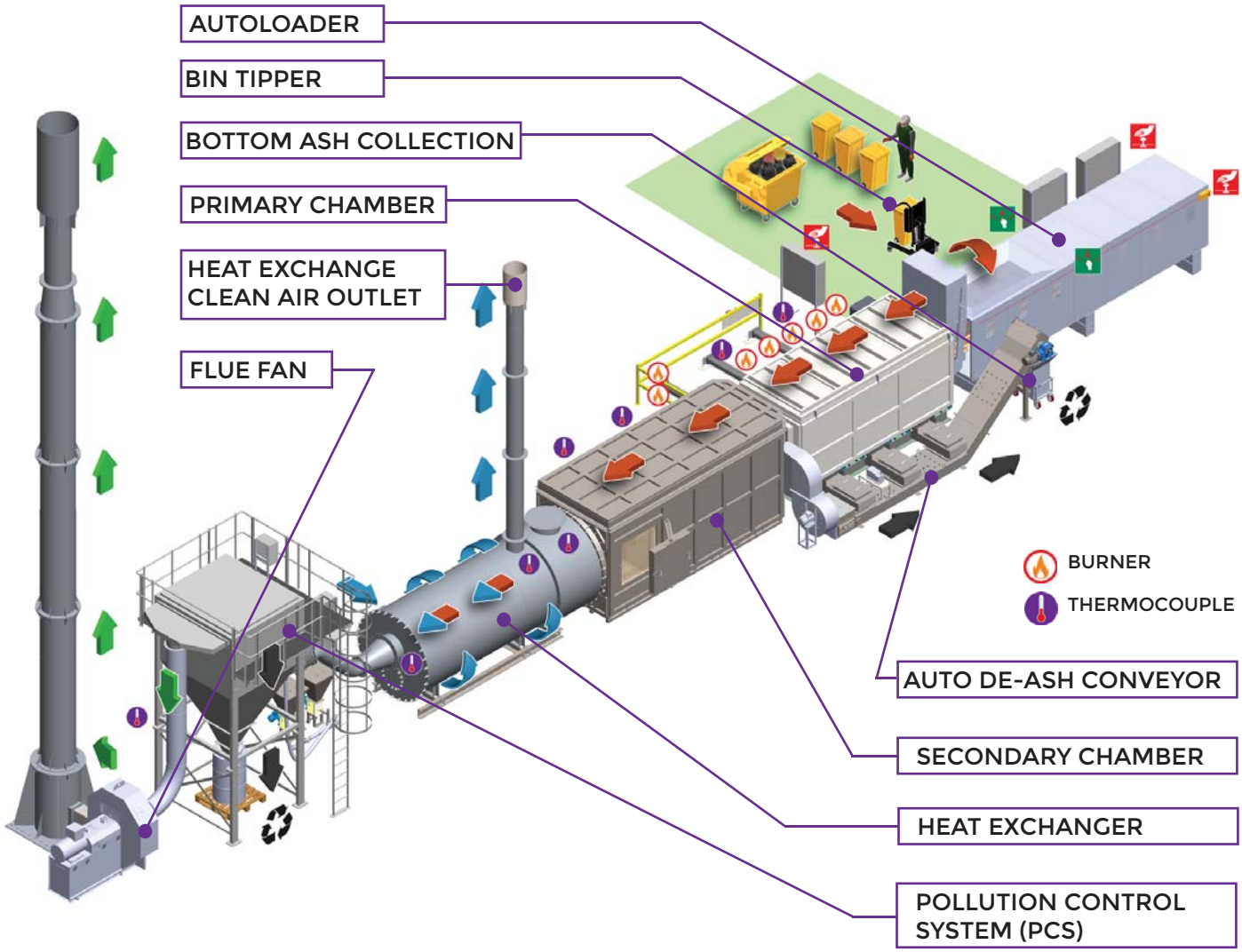
WASTE FLOW & SUB-COMPONENTS

model: **i8-1000 line**



THE INCINERATION PROCESS

Incineration is a waste treatment process that utilises the combustion of organic substances contained within materials to convert waste into ash, heat and flue gas. As part of the incineration process 3-5% residual ash remains in the ash chamber. Depending on the waste stream being processed, this ash typically contains glass, porcelain, and other metal components that can be reclaimed and recycled.

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 and/or specialsed pollution control filtration systems.

GLOBAL APPLICATIONS

- Medical & Pharmaceutical Waste
- Hospital & Health Clinic Waste
- Emergency / Refugee Camps
- Military Camp Waste
- Large Volume Domestic Waste
- Industrial Waste
- Hotels & Resorts
- Mining and Construction Sites
- Island Communities

For more information, speak to one of our experts:

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COMPONENT OVERVIEW

model: **i8-1000 line**

AUTOLOADER

The autoloader consists of a large capacity stainless steel hopper with pneumatic louvred lid allowing a single operator to provide a continuous supply of waste to the incinerator at the push of a button. It requires no human interaction with the waste stream or the combustion chambers making the process of loading waste a much safer operation.

The loading cycle is highly efficient taking around 20 seconds to complete which helps to minimise any heat loss during loading and associated fuel costs in maintaining operating temperatures. The autoloader also ensures that waste is distributed consistently and evenly along the length of the primary chamber, further improving combustion and efficiency.

PRIMARY AND SECONDARY CHAMBERS

As the largest in our range, the i8-1000 features a 8.80m³ large capacity primary chamber with maximum airflow and circulation for a fast, efficient burn. Features include advanced Coretex Technology, hydraulic top loading door with chamber operating temperatures up to 1200°C. The i8-1000 can also be configured with autoloader and auto de-ash systems for a highly efficient, continious supply of waste to the incinerator.

Sometimes referred to as the 'afterburner', the secondary chamber operates at temperatures up to 1200°C and is specifically designed to contain and re-burn the waste gases for a minimum of 2 seconds, in accordance with the International Emissions Directive (IED) and environmental guidelines. This carefully engineered combination of high temperatures and extended retention time ensures the complete destruction of dioxins and other harmful emissions, providing a smokeless and odourless output from the stack.

HEAT EXCHANGER

The heat exchanger plays a crucial role of rapidly cooling the hot exhaust gases before they are processed through to the pollution control system. This reduces the formation of dioxins and furans.

The heat exchanger is a shell and tube design with the hot contaminated gases passing through the inner tubes. Throughout this process, air is forced around the inside of the shell circulating over the tubes to cool the exhaust gases within.

POLLUTION CONTROL SYSTEM (PCS)

Our dry scrubbing PCS operates by injecting sorbent material (sodium bicarbonate and/or active caron) into the flue gas stream where it reacts and combines to capture and remove the pollutants produced through the incineration process.

The PCS provides continuous filtration of the waste gases and fly ash through a series of filters in self-contained pods. Each filter element is manufactured from a high-density ceramic material designed to remove particles as small as 1 nanogram (billionth of a gram) with 99.99% efficiency.

A dry scrubbing PCS is widely recognised in the incineration industry as one of the cleanest and most effective methods of neutralising harmful emissions and eliminating microscopic waste particles. As the name suggests, dry scrubbing does not use any liquids unlike venturi systems and therefore does not produce any wastewater sludge which requires further treatment before disposal.

Dry scrubbing pollution control systems have one of the lowest operating costs since they do not require any additional equipment such as pumps, settling tanks and waste water treatment systems.

Our PCS systems meets all European emission standards and directives in successfully capturing pollutants that could otherwise pose a threat to the environment, air quality or public health.