

# ENVIRONMENTAL

COMBUSTION TECHNOLOGIES

## PRODUCT BROCHURE

ENVIROCREM  
CREMATORS

**Dignity. Efficiency. Sustainability.**



## INTRODUCTION

# ENVIROCREM

CREMATORS

The **EnviroCrem Human Cremator** is a state-of-the-art solution designed for modern crematoria seeking the highest standards in quality, economic efficiency, and environmental compliance. Engineered with precision, the EnviroCrem cremator delivers reliable and respectful cremation services, ensuring the dignity of the process while optimising operational performance.

The EnviroCrem cremator stands out with its advanced combustion technology, which not only ensures complete and efficient cremation but also meets the strictest environmental regulations. For facilities requiring additional emission control, the EnviroCrem offers an optional abatement plant that further reduces pollutants, making it an environmentally responsible choice.

Economic efficiency is a key focus of the EnviroCrem Human Cremator. With low fuel consumption, optimised combustion cycles, and reduced maintenance needs, it offers a cost-effective solution that balances performance with operational savings. The robust construction ensures durability and long-term reliability, making the EnviroCrem cremator a valuable investment for any crematorium.



## DID YOU KNOW...



The **EnviroCrem Human Cremator** is already the most thermally efficient cremator on the market today, but ECT have taken it even further...

Our latest **design enhancements** make the EnviroCrem **30% more efficient**, **reducing preheat times and lowering overall fuel consumption** whilst still maintaining optimal operating temperatures.

When combined with ECT's Hot Hold technology, this results in a **truly world-class human cremation arrangement**.

## KEY INFORMATION

# ENVIROCREM

CREMATORS



The EnviroCrem Human Cremator offers superior quality and is built with high-grade materials for durability, reliability. It delivers long-lasting performance in high-demand environments.

- **Economic Efficiency:** Designed to minimise fuel consumption and operational costs, providing a cost-effective cremation solution.
- **Environmental Compliance:** Meets stringent environmental standards with advanced combustion technology and offers an optional abatement plant for enhanced emission control.
- **Optional Abatement Plant:** Provides additional pollution control for facilities seeking to further minimise their environmental impact.
- **Reliable Performance:** Ensures consistent and respectful cremation services, supporting the dignified handling of remains.

### SPECIFICATIONS

- **Safe Load / Capacity:** 318 kg (50 stone)
- **Control Panel:** PLC Control Panel
- **Electrical:** 220/400 volt, single/three phase, 50/60Hz, 16 Amp
- **Cremator Burner(s):** 1
- **Secondary Burner(s):** 1

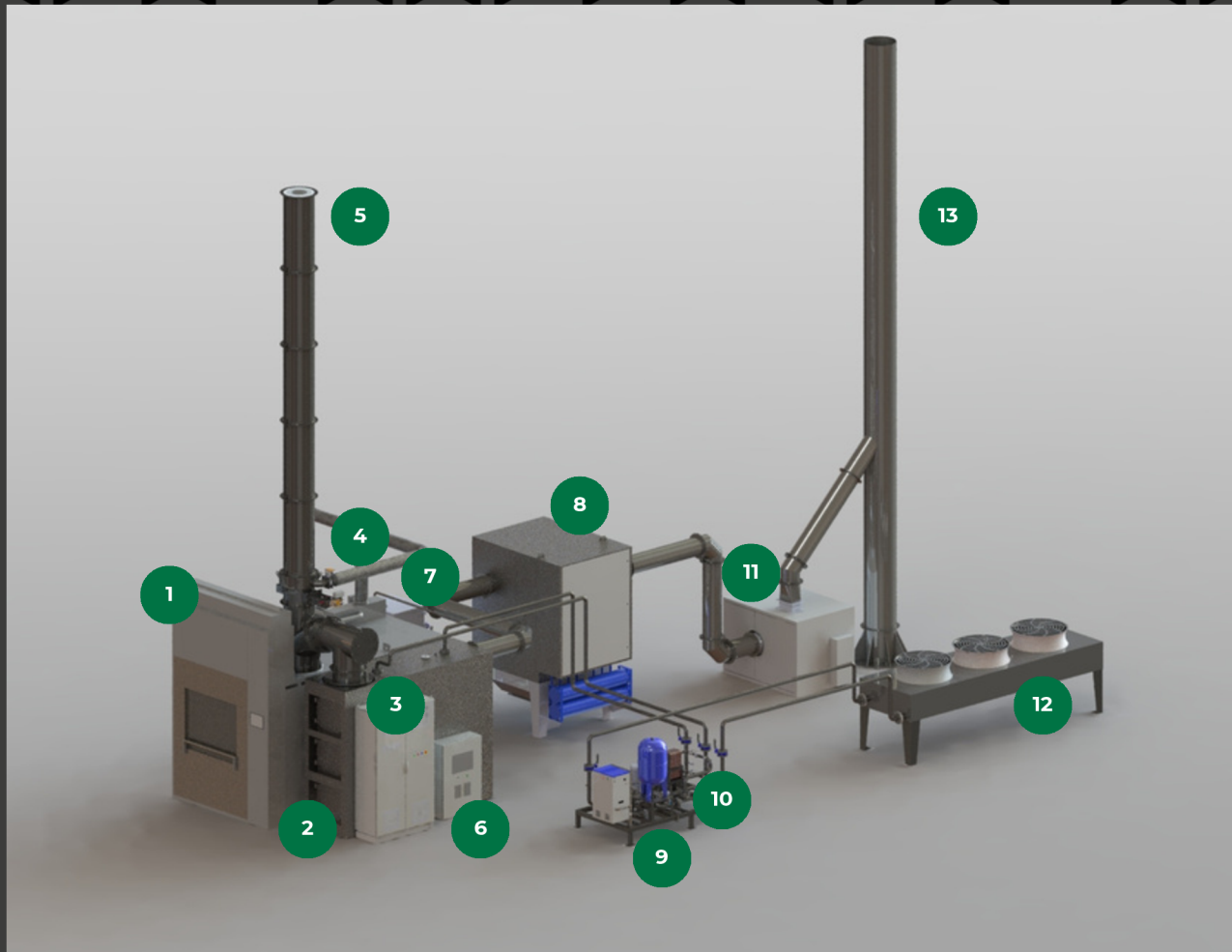
### DESIGN FEATURES

- Nominal throughput up to 75kg per hour.
- Fully automated PLC controls for simple, efficient operation.
- Designed for maximum productivity.
- Approved under the Process Guidance Note PG 5/2 (12) and PGN 5/2 (25), ready.

### FOOTPRINT

- **Length:** 3900mm
- **Width:** 2300mm
- **Height:** 3600mm
- **Weight:** 18.5 tonne
- **Chimney Height:** 8m

## KEY INFORMATION



### ENVIROCREM INSTALLATION KEY

1. EnviroCrem Cremator Unit
2. Primary Heat Exchanger
3. Control Panel
4. Combustion Air Fan
5. Emergency Relief Vent (ERV)
6. Urea Dosing System
7. Reagent Dosing Unit
8. Bag Filter
9. Water /Glycol Pump Set
10. Heat Recovery Exchanger
11. Induced Draught Fan
12. Air Blast Cooler
13. Exhaust Chimney

### WHAT IS INCLUDED IN A FULL ABATEMENT SYSTEM?

A modern flue gas treatment system typically features:

- **Urea Dosing:** To reduce nitrogen oxides (NO<sub>x</sub>) emissions.
- **Gas Cooling Systems:** To optimise conditions for pollutant capture.
- **Reagent Dosing:** To neutralise acid gases, and capture dioxins/furans and heavy metals.
- **High-Efficiency Filters:** To remove particulates from the exhaust stream.
- **Continuous Emissions Monitoring:** To provide reports to meet the requirements.

[sales@ectechltd.com](mailto:sales@ectechltd.com) | [www.ectechltd.com](http://www.ectechltd.com)

## ACCESSORIES

# ENVIROCREM

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Engineered for precision and ease of use, the **Manual Coffin Handling Charging Machine** ensures smooth and respectful coffin charging while reducing manual handling risks for operators.

- Length: 2692 mm
- Width: 710 mm
- Closed Height: 400 mm
- Fully Extended: 1727 mm
- Lift: 1327 mm
- Weight: 110 kgs
- Lift Capacity: 285 kgs



The **Motorised Coffin Charging Machine** provides safe, efficient, and dignified coffin handling in cremation facilities, using a powered drive system to reduce manual effort and ensure precise, seamless loading.

- Cremator Docking Station.
- Replacement Cremator front panels to accept docking station.
- 150mm Charging head extension.
- Push bar.
- Digital weighing attachment.



The **Electric Ash Processor** operates automatically once the cinerary box is inserted, eliminating manual handling and preventing ash dispersion. This ensures hygienic conditions for operators.

- Length: 1780 mm
- Width: 710 mm
- Height: 1730 mm
- Weight: 800 kg
- Electrical Data: 380/220 Volt – 50 Hz
- Electrical Power: Installed 2.2kW
- Electrical Power Consumption: 1.1kW



## ABOUT US

# ENVIRONMENTAL

## COMBUSTION TECHNOLOGIES

Environmental Combustion Technologies (ECT) is a leader in the design, manufacture, and supply of advanced combustion systems, a total solutions provider specialising in human cremators, pet cremators, waste incinerators, and waste-to-energy applications.

ECT draws together a combination of seasoned industry experts possessing decades of collective experience with dynamic new talent drawn from diverse engineering disciplines. This powerful blend of deep-rooted knowledge and fresh, innovative perspectives creates a truly progressive and collaborative team.

With backgrounds spanning combustion, process, and environmental engineering, our team thrives on cross-disciplinary thinking. Our experienced professionals provide strategic insight and proven methodologies, while our emerging engineers challenge conventions and drive creative problem-solving.

What unites us is a shared vision: to pioneer the most sustainable engineering solutions for a rapidly evolving world. Together, we're committed to delivering cutting-edge yet practical innovations that meet today's challenges while safeguarding tomorrow's resources.

### OUR VISION

To lead the transformation of the cremation, waste incineration, and waste-to-energy sectors through cutting-edge, sustainable engineering solutions that set new industry benchmarks for environmental performance and operational efficiency.

### OUR APPROACH

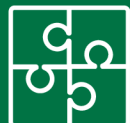
We offer an integrated portfolio of high-performance systems and modular technologies engineered for real-world applications. Our solutions are designed to optimise environmental outcomes without compromising on reliability, cost-efficiency, or compliance.

By aligning technical innovation with the realities of operational requirements with consideration for infrastructure and resource constraints, we deliver tailored, future-ready systems that support long-term sustainability goals—without sacrificing practicality or performance.

#### At our core we are:



CURIOUS  
& CREATIVE



SOLUTIONS  
ORIENTED



GLOBALLY  
AWARE



PARTNERSHIP  
DRIVEN



ADAPTIVE &  
RESILIENT



SUSTAINABILITY  
FOCUSED

# ENVIRONMENTAL

COMBUSTION TECHNOLOGIES



All Crematory and Industrial Equipment and Engineering amalgamated and renamed as **Matthews Cremation Division**.

1996

2008



**Giust Environmental Machinery (GEM)** becomes part of **Matthews Cremation Division** as an expansion strategy into the European market.



2010

**Furnace Construction Company Limited** split, with the new Furnace Construction Cremators Limited joining Matthews Cremation Division.

2012



**Todaysure Ltd** is acquired by Matthews International Corporation as an expansion strategy beyond the human cremation market.



2015

Matthews Cremation Division was renamed as **Matthews Environmental Solutions** to enhance our profile and better encompass the range of products and services provided by the division.

2024



The European divisions of **Matthews Environmental Solutions** were subjected to a management buy out resulting in the formation of Environmental Combustion Technology Ltd, a full-service thermal treatment plant solutions provider based UK.



## OUR ACCREDITATIONS



To learn more about our class-leading EnviroCrem Human Cremator unit, please contact a member of the ECT Sales Team today.

 +44 (0) 161 337 4488

 [sales@ectechltd.com](mailto:sales@ectechltd.com)

[www.ectechltd.com](http://www.ectechltd.com)