























Dutch Incinerators BV
Lucas Van Den Broeck
Website:
https://dutchincinerators.com

THERMAL TREATMENT TECHNOLOGIES

CHEMICAL, TOXIC & CORROSIVE WASTE

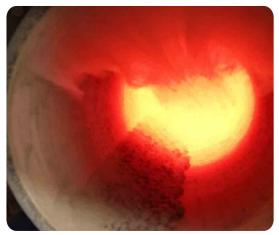
Eco-Friendly, Reliable, Compliant and Safe











Introduction

Dutch Incinerators' (DI-NL) headquarters is in the Netherlands, with presence in Thailand (DI-TH) and a joint venture with Environ Ltd in the UK (Environ DI Limited).

As an EPC contractor, DI has specialized and built an excellent reputation in the design and construction of industrial scale thermal treatment plants for most offensive and exotic waste streams, with an engineering team having more than 30 years technical and operational expertise.

DI's selected thermal treatment technologies are robust in construction, versatile in waste acceptance, compliant with international and local regulations, reliable and safe in operation.

DI Turnkey Expertise

- Rotary Kiln Incineration (Hazardous & toxic waste treatment)
- Vacuum Distillation (Solvent recovery)
- Thermal Desorption (Soil cleaning)

Rotary Kiln Features

Product range

Small to medium incineration plants, designed for a thermal input capacity from 1.5MW to 20MW.

Throughput

The throughput capacity corresponds to the overall designed thermal input capacity, which is directly related to the average HCV calorific value of the waste.

Operating cycle

Fully automated for continuous 24/7 operation.

Feeding system

Design options available to accommodate IBCs and 205 litre drums, organic, inorganic, solids, dust, gases, liquids, semi-liquids, emulsions, pastes, slurries, sludges, wastewater, high and low calorific value waste streams.



- Primary combustion

Auxiliary fuel is only required at start up for approximately 5 hours. When the waste calorific value and oxygen supply are adequate, a continuous thermal chain reaction and self-supporting combustion of the waste takes place, without the need or support of the auxiliary burners.

- Secondary combustion

The post combustion (PC) zone provides for a minimum of 2 seconds residence time for the combustion gases to achieve the required 850°C or 1100°C flue gas temperature.

Energy recovery

Hot flue gases produced in the process are utilized for energy recovery. Several options are available with multiple applications, i.e.: hot and chilled water, steam and power.

• Flue gas treatment

Combined dry and wet scrubbing is the most reliable and recommended solution to ensure compliance with the applicable Emission Limit Values (ELV) for thermal treatment of heterogeneous hazardous waste streams.

Emissions

To ensure that the emitted air into the atmosphere is sufficiently clean and complies with international and local applicable emission standards, a Continuous Emission Monitoring System (CEMS) is installed.

Availability & uptime

Our unique DI incinerator design guarantees a minimum annual availability of 8,000 hours. The uptime performance is >91.3%.

OPEX

Operational expenses remain low and are limited to:

- Diesel or gas (for cold start-up only, 5 hours/year)
- Power (CHP options available to cover plant parasitics)
- Water
- Flue gas cleaning additives and reagents
- Ash disposal (kiln bottom ash & fly ash)
- Operators (2 workers per shift)
- Maintenance (one pre-scheduled annual shutdown)

Standards & Directives

All designs are compliant with International Standards and local regulations:

- European Waste Incineration Directive 2000/76/EC (WID)
- European Industrial Emissions Directive 2010/75/EU (IED)
- Best Available Techniques (BAT) Conclusions for Waste Incineration, as published in the EU Official Journal on December 3rd 2019.
- CE certified
- UKCA certified



















