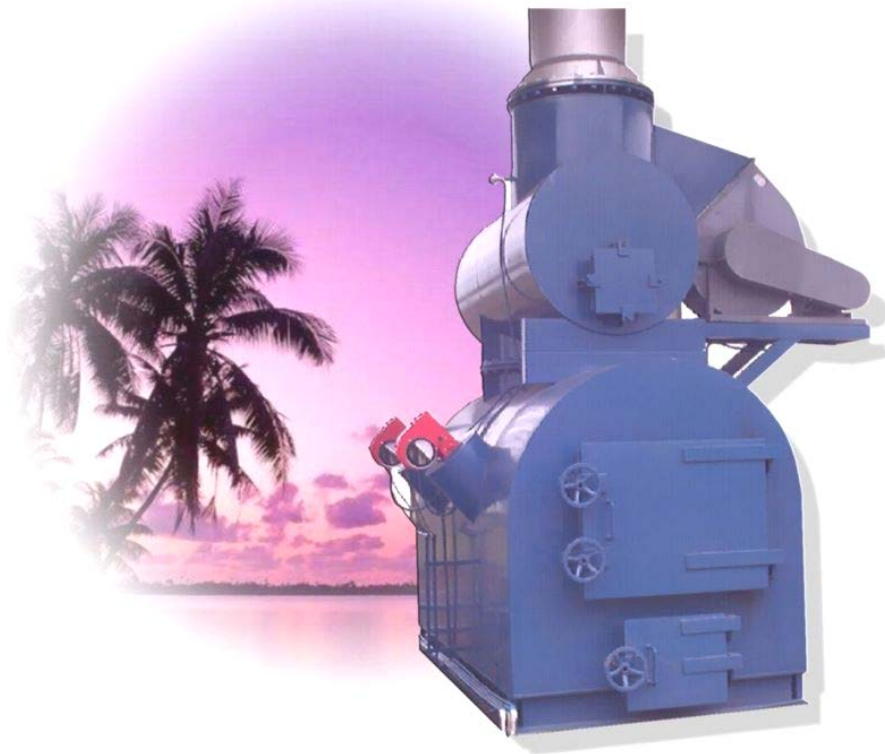




Solid and Liquid Waste INCINERATOR

IC Series



Clean , safe and no polluting.

The **thermo Q** product line covers a wide range of incinerator systems ranging from municipal solid waste to automatic incinerators for infectious medical waste from hospitals and clinics, liquid waste and sludge waste from industrial, as well as industrial solid waste.

Multy Chamber Design

The **thermo Q** Incinerator multy chamber design is one of many reasons that thermo Q – IC Series Incinerators meet the construction regulations and tough emission rules issued.

Extra combustion air is injected into the after burning chambers, ensuring destruction of all unburned particles. This extra flow prevents not only unburned particles, but also flames from escaping the incinerator and cooling down gas entering the chimney.

The unique **thermo Q** systems ensures safe and clean disposal of waste combined with energy recovery systems for various purposes (e.g. heating, steam production, etc.) saving operational costs.

Safety and Reliability

Operational advantages

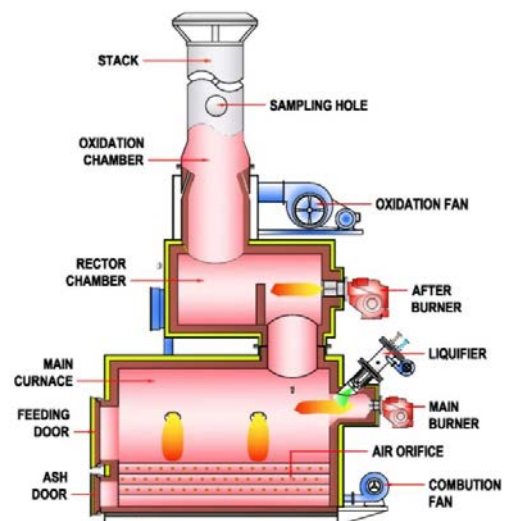
- No shredding of waste necessary prior to charging
- Low fly ash carry over
- Gas tight incinerator casing = no false air inlet = controlled high efficiency combustion process
- Constant horizontal stirring of the waste in combination with long retention time = no passing of unburned solid material
- No passing of unburned liquids to ash collection
- Capable of injecting liquid waste together with solid waste
- High thermal efficiency = maximum heat recovery
- Rapid cooling of the flue gases = minimal risk of reformation of dioxins
- Multiple layers of insulation = low heat radiation to incinerator room
- Refractory made from high alumina C 1.600 with max. temp. operation 1.600 °C

Key Features

Our incineration know-how, design and technology, offers important and unique features such as:

- the safety *charging sluice*, eliminating the risk of back-fire and *smoke* escaping to the incinerator room.
- the *special slow* transport of ash and stirring of the waste, providing maximum burn out and low fly ash carry over.
- the integrated *ash burn out chamber* securing *total burn out* of the ashes.
- the special secondary chamber designed to effectively keep a minimum *retention time of 2 seconds* at the required temperature at all times.
- the *specially designed refractory* lining, made from highly chemical resistant pre-cast elements. The design keeps the incinerator's surface temperature within 25 °C above room temperature.
- the *modular design* makes it easy to transport and assemble.
- the *fully automatic control system* reducing the need for operating personnel and securing a 100% controlled incineration process complying with any applied emission requirement.

The above mentioned features are only a few of many that will guarantee you, as customer, successful operation for many years to come.



Liquid and Solid Waste Incinerator Cut View

Technical features

Capacity range

50 – 1.000 kg/h

Type of Waste

- Hospitals and clinics
- Pharmaceutical plants
- Veterinary facilities
- Municipal Solid Waste (MSW)
- Industrial Waste
- Shipboard Waste
- Pathological/Animal Carcass Waste
- Other waste types

Specific Heat Content of Waste

0 - 40 MJ/kg - depending on waste type

Liquifier Type

Atomizing Nozzle with Compress air mix.

Incinerator Operating features

- Batch or Continuously 8 - 24 h/day
- Intermittent one or two shift operation

Operating Temperatures

- Primary Chamber: 600 - 850 °C
- Secondary Chamber: min. 800 °C, 1.100 °C, 1200 °C or other minimum temperature depending on regulation
- Retention time: 2 seconds

Flue Gas System - optional

- Water- or steam boiler with energy recovery system
- Flue gas treatment system designed according to waste composition and requirements, i.e.:
 - Dry scrubber
 - Wet scrubber
 - Ceramic filter
 - Or a combination of the above
- ID-fan
- Stack

Control system

Fully automatic C/W temperature display indicator .

Liquid Waste Incinerators



Liquid waste incinerator

The **thermo Q** liquid waste incinerators are custom designed to provide efficient destruction of your waste liquid.

When the heating value of the liquid is sufficient, it is burned directly in a high intensity burner eliminating the need for auxiliary fuel except during warm up. Waste liquids which contain insufficient combustibles to be self sustaining are injected into the incinerator's combustion chamber by various methods.

Thermal capacities of up to 6 MM Btu/hr are available. Ancillary equipment often supplied includes heat recovery boilers and wet gas scrubbing systems.

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