

# INCINERATOR



**ISO 9001:2000**



# ALFA-THERM INCINERATOR

Environmental protection is one of the prime concern and it has led to the development of various waste management systems. The most advanced and safe way of getting rid from waste and achieving volume reduction is through Alfa-Therm Incinerators.

## BIO-MEDICAL WASTE INCINERATOR

Proven Design conforming to emission standards of Pollution Control



- Quality combined with proven & reliable technology keeps maintenance to minimum.
- Technological breakthrough to build complete system in compact size, no civil work and instant installation at site.
- Refractory lining suitable to withstand temperature above 1400°C:

### Options :

- Available in Oil Fired, Gas Fired and Electrical design.
- Available with Highly advanced Air Pollution Control Devices like Bag Filter, Packed Scrubber, 3 Stage Scrubbing System.
- Automatic waste charging.
- Auto-ash removal system.
- Heat Recovery units for hot water/steam from flue gases.
- PLC control panel.
- Online Display and Recording device.

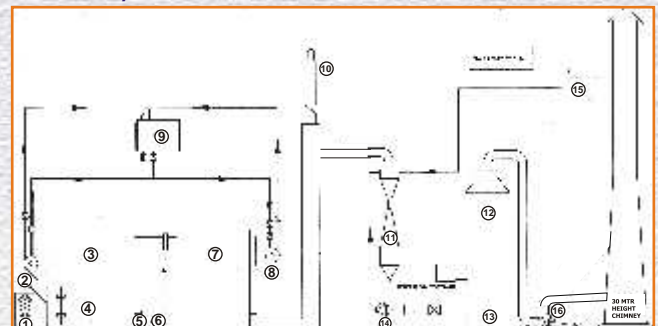


Incinerator with Venturi Scrubber



30 Mtr. high Chimney

Layout of Incinerator with Venturi Scrubber



- |                        |                             |
|------------------------|-----------------------------|
| 1. CONTROL PANEL       | 9. FUEL OIL TANK            |
| 2. PRIMARY BURNER      | 10. EMERGENCY STACK         |
| 3. PRIMARY CHAMBER     | 11. VENTURI SCRUBBER        |
| 4. WASTE CHARGING DOOR | 12. DROPLET SEPARATOR       |
| 5. DE-ASHING DOOR      | 13. RE-CIRCULATION TANK     |
| 6. COMBUSTION AIR FAN  | 14. RE-CIRCULATION PUMP     |
| 7. SECONDARY CHAMBER   | 15. EMERGENCY OVERHEAD TANK |
| 8. SECONDARY BURNER    | 16. I.D FAN WITH MOTOR      |



Primary and Secondary Chambers of Horizontal Incinerator

# SMOKELESS ODORLESS

## GENERAL WASTE INCINERATOR

### Type of waste

- Paper
- Garbage, Refuse
- Leather
- Rice grass
- Non-eatable foods
- Synthetic resin
- Rubber
- Tyres
- Hotel/Resort Waste
- Any other waste having some calorific value

### WASTE CATEGORIES

**Type A : Trash**, a mixture of highly combustible waste such as paper, cardboard, cartons, wood boxes and combustible floor sweepings from commercial and industrial activities. The mixtures contain upto 10% by weight of plastic bags, coated paper, laminated paper, treated corrugated cardboard, oily bags and plastic & rubber scraps. This type of waste contains 20% moisture, 5% incombustible solids and has a heating value of 4700 kcal. per kg. as fired.

**Type B : Rubbish**, a mixture of combustible waste such as paper, cardboard cartons, wood scrap, foliage and combustible floor sweeping from domestic, commercial and industrial activities. The mixture contains upto 20% by weight of restaurant or cafeteria waste, but contains little or no treated papers, plastic or rubber wastes. This type of waste contains 25% moisture, 10% incombustible solids and has a heating value of 3600 kcal. per kg as fired.

**Type C : Refuse**, consisting of an approximately even mixture of rubbish and garbage by weight. This type of waste is common to apartment and residential occupancy, consisting of upto 70% moisture, 7% incombustible solids, and has a heating value of 2350 kcal per kg as fired.

**Type D : Garbage**, consisting of animal and vegetable wastes from restaurants, cafeterias, hotels, hospitals, markets and like installations. This type of waste contains upto 75% moisture, upto 5% incombustible solids and has a heating value of 1400 kcal per kg as fired.

**Type E : Human and animal remains**, consisting of carcasses, organs and solid organic wastes from hospital and similar sources, consisting of upto 85% moisture, 5% incombustible solids, and having a heating value of 550 kcal per kg as fired.



### BIO-MEDICAL & GENERAL WASTE INCINERATORS

Model	Capacity	Model	Capacity
BMW / GW-5	5 Kg/hr	BMW / GW-100	100 Kg/hr
BMW / GW-10	10 Kg/hr	BMW / GW-125	125 Kg/hr
BMW / GW-15	15 Kg/hr	BMW / GW-150	150 Kg/hr
BMW / GW-20	20 Kg/hr	BMW / GW-175	175 Kg/hr
BMW / GW-25	25 Kg/hr	BMW / GW-200	200 Kg/hr
BMW / GW-30	30 Kg/hr	BMW / GW-250	250 Kg/hr
BMW / GW-40	40 Kg/hr	BMW / GW-300	300 Kg/hr
BMW / GW-50	50 Kg/hr	BMW / GW-400	400 Kg/hr
BMW / GW-75	75 Kg/hr	BMW / GW-500	500 Kg/hr

Higher capacity Incinerators are available on demand

\*BMW -Biomedical Waste , GW -General Waste

Note : Design & Specifications are subject to change.





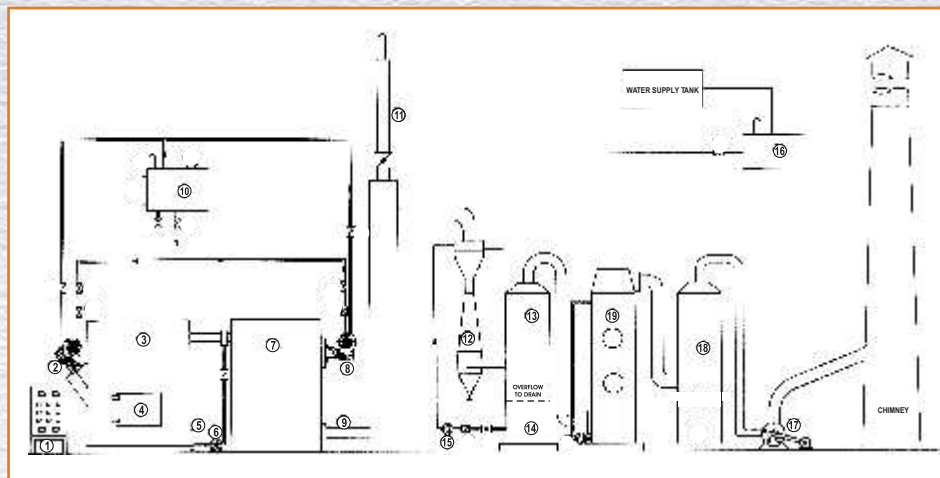
## INDUSTRIAL WASTE INCINERATOR



### Type of waste

- Oil Soaked Cotton Waste
- Oil Soaked Rags
- Oil Contaminated Waste
- Paper & Cardboard Boxes from Industries
- Paint Waste
- Any other waste having calorific value

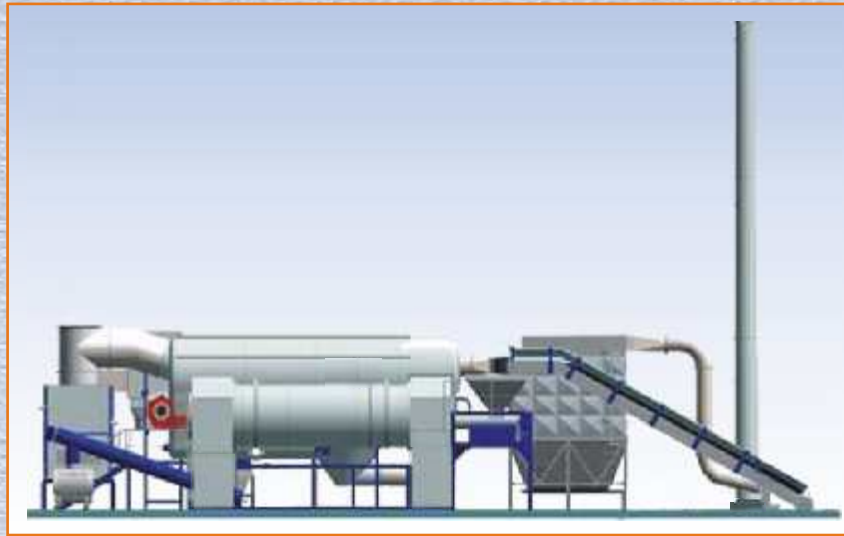
**Capacities available from 10 kgs/hr to 500 kgs/hr**



- |                        |                          |                         |   |
|------------------------|--------------------------|-------------------------|---|
| 1. CONTROL PANEL       | 6. COMBUSTION AIR FAN    | 11. EMERGENCY STACK     | 16. EMERGENCY OVERHEAD TANK                         |
| 2. PRIMARY BURNER      | 7. SECONDARY CHAMBER     | 12. VENTURI SCRUBBER    | 17. I.D FAN WITH MOTOR                              |
| 3. PRIMARY CHAMBER     | 8. SECONDARY BURNER      | 13. DROPLET SEPARATOR   | 18. TREATMENT UNIT FOR OXIDES,<br>CO & HYDROCARBONS |
| 4. WASTE CHARGING DOOR | 9. REFRACTORY LINED DUCT | 14. RE-CIRCULATION TANK | 19. PACKED BED SCRUBBER                             |
| 5. DE-ASHING DOOR      | 10. FUEL OIL TANK        | 15. RE-CIRCULATION PUMP |   |

# ROTARY KILN INCINERATOR

**Most suitable for large waste volumes ; 500 kg/hr and above.**



## INCINERATOR SPECIFICATIONS

The Incinerator is Double chambered. Primary incineration chamber is rotary kiln type and secondary incineration chamber is stationary type.

In the Rotary incinerator, the primary chamber of the incinerator keeps rotating. The flue gas and waste travel in opposite direction in the chamber to ensure maximum efficiency of combustion. There is no need for raking of waste. The ash in the primary chamber falls at the bottom and automatically gets collected into ash container.

The rotary chamber is designed to withstand extremely high temperature and is refractory lined and insulated accordingly.

The rotary chamber is provided with a variable speed drive to achieve the desired speed of rotation depending on waste being incinerated.

The Rotary-Kiln Incinerator has a long, slightly inclined primary chamber through which waste is moved continuously. The incinerator comprises of a cylindrical mild steel chamber (primary chamber), stationary secondary chamber and flue gas treatment systems. The waste is fed inside the incinerator through hopper and ram loader that operate automatically. The heating is provided with primary and secondary burners. The outlet withdraws the ash from the incinerator. The flue gases are transferred from the rotary drum into the secondary chamber for post combustion where there is sufficient residence time for flue gases. Thereafter the gases pass through the flue gas cleaning system which is designed as per emission norms required by the customer. The Rotary Kiln Incinerator is suitable for incinerating all types of waste.

## FEATURES

- Rotating Primary Chamber.
- Automatic Waste Feeding.
- Automatic Ash Removal.
- No waste raking necessary.
- All hopper operation automatic.
- Fully Automatic Pressure Jet Burners.
- Sufficient Residence time of flue gases in Secondary Chamber.
- Chimney height as per site requirement.



**HORIZONTAL MODEL WITH AUTOMATIC FEEDING**



**VERTICAL MODEL**



**AUTOMATIC RAM LOADER**



**AUTOMATIC BUCKET LOADER**



**COMPLETE INCINERATION :**

Due to its unique design, the Incineration of waste is 100% and no particles are left unburnt except sterile ash.



**ECO FRIENDLY**

**FOR HEALTHY SURROUNDINGS :**

The Alfa-Therm Incinerator does a tremendous job towards keeping the environment clean & healthy. It's specially designed chambers ensure that no particles or ash is let out of the exhaust.



**TOP OF THE LINE MATERIAL :**

At the time of designing and construction of the Incinerator utmost care has been taken to use only the high quality and best standard material and components. And you get a high quality product, ensuring long lasting trouble free performance for years and years.



**EASY TO OPERATE**

**EASY OPERATION :**

The Alfa-Therm Incinerator does not need a skilled person to operate. Because of its ergonomic design anyone can operate it easily and safely.



**SPACE SAVER :**

Today when space is measured in inches, we have introduced uniquely designed twin chambered Incinerators in which chambers are mounted on the top of other. By using vertical model you can save your precious surface area.



**PROMPT SERVICE**

**ALWAYS AT YOUR SERVICE :**

Our responsibility starts when we make you our customer. To ensure prompt and reliable service, we have service centres spread all over India where professionally qualified engineers and technicians are available. Be assured, your problem is ours, that's why after sales service is our prime concern.



**Alfa-Therm**

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