FORTIFYING FUTURE WITH FUTURISTIC WASTE MANAGEMENT

- WASTE INCINERATION
- MATERIAL SHREDDING
- MATERIAL RECOVERY FACILITIES
- MUNICIPAL WASTE COMPOSTING
MANAGING WASTE TODAY FOR A SUSTAINABLE LIFE TOMORROW.

Bringing the dream of sustainable future closer to our lives, Alfa Therm, a highly reputed waste management firm works towards utilizing expert manpower and world-class technology for proper disposal of waste from various industries. Supporting and encouraging the management of waste in a structured manner, Alfa Therm has established significant benchmarks for the industry to follow.

ABOUT US

Alfa Therm Limited an ISO 9001:2008 co. since 1989 is the pioneer manufacturer of Waste Incinerators, Municipal Solid Waste Management plant and Equipment, Shredding systems and Process Heating equipment, with approx. 15,000 installations in India & abroad.

Alfa Therm today stands as the leader in India for providing most efficient waste management equipment and solutions for all the waste types ranging from Medical / Municipal / Industrial / Hazardous / Animal / General and Electronic waste.

We have been providing latest technology plant and equipment with our strong in-house R&D and dedicated and qualified Design, Production, Quality and After sales team.

Our modern manufacturing facility, spread over 125,000 sq. ft. is well equipped with the latest plant and machinery for high quality equipment manufacturing.

Alfa-Therm products are being used by leading industrial houses and several government organizations in India besides our overseas installations in Kingdom of Saudi Arabia, Azerbaycan, U.A.E., Syria, Lebanon, Cyprus, Afghanistan, Nepal, Bangladesh, Sri Lanka, Bhutan, Brunei, Vietnam, Maldives, Fiji, New Zealand, British Virgin Islands, Honduras, Colombia, Hungary, Germany, Libya, Sudan, Congo, Guinea, Mauritania, Liberia, Sierra Leone, Nigeria, Kenya, Tanzania, Namibia, Angola, Seychelles etc.

ENABLING A HEALTHY ENVIRONMENT

It’s imperative to let the environment breathe fresh by keeping the waste in check through methodologies that are sustainable in nature. Waste Management solutions by Alfa Therm include technologies that handle, monitor, treat, reuse and dispose wastes of various forms in an effective manner.

FRESH APPROACH WITH A FUTURISTIC VISION

Alfa Therm realizes that the growing urban and industrial hubs will continue to give out tonnes of waste into the cities and natural resources which could lead to rapid deterioration in levels of sanitation and general quality of urban life. Managing waste is not only crucial for the environment, but also for your business/society to carry out operations/healthy lifestyle without disrupting the nature.
INCINERATORS

DISPOSAL BY MEANS OF COMBUSTION

Incineration is a waste disposal method in which solid, liquid and sludge wastes are subjected to combustion, converting them into residue and gaseous products. The incinerator is provided with appropriate air pollution control equipments that clean the flue gases of gaseous and particulate matter before releasing them into the atmosphere.

Incinerators successfully reduce the solid mass of the original waste by 80-85% and the volume by 95-96%.

Alfathein incinerators come with the option of wet or dry air pollution control in the form of:

- Cyclone separators
- Low pressure wet scrubbers
- High pressure venturi scrubbers
- Fabric Filters
- Ceramic Filters (EU Compliant)
- Electrostatic Precipitators

The Core Competence of Alfathein lies in designing and manufacturing of all types of waste incinerators as stated below:

- Medical / Hospital Waste
- General Waste
- Industrial Waste
- Hazardous Waste
- Petrochemical Waste
- Pharmaceutical Waste
- Animal Waste
- Poultry Waste
- Slaughter House Waste
- Textiles and Packaging Waste
- Integrated Solid and Liquid Waste
- Any other type of Waste

Alfathein experts assess waste streams and suggest the right incinerator and air pollution control technology for you.
MSW COMPOST PLANTS

MUNICIPAL SOLID WASTE MANAGEMENT

Municipal Solid Waste (MSW) consists of everyday items that are discarded by people. Alfa Therm Limited offers latest modern mechanized plants with capacity 2 tons/day to 2000 tons/day. Offering various technical solutions, we also provide equipments based on multiple technologies as per waste type for compost lines and Refuse Derived Fuel, keeping in mind the requirements of Rural and Urban Areas. We take pride in various Alfa Therm Compost Plants running all across the country on Electrical and Hydraulic Modules.
ORGANIC WASTE IN VESSEL COMPOSTER

DECENTRALISED COMPOSTING SOLUTIONS

Composting is the controlled decomposition of organic materials into a rich soil known as compost. By composting organic waste you are returning nutrients back into the soil in order for the cycle of life to continue. Composting reduces the volume of organic waste significantly, while the compost produced is used for agricultural and horticultural purposes.

Decentralizing the composting process, Alfa Therm offers two types of compost units:

- **10 Days Compost Machine**
  - The machine is most ideal for smaller setups to convert food waste into compost. It is economical in cost and comes with a curing system in which compost matures in controlled humidity and environmental conditions. Batch type operation makes it easier in bringing down the initial investment.
  - Machine capacity: 100, 200, 300, 500, 600, 1000, 1500, 2000, 3000, 5000, 10000 kg per day.

- **24 Hours Quick Compost Machine**
  - The compost 24 is the most advanced composting machine that converts food waste into compost in just 24 hours. No need for a separate curing system, this model is well equipped with moisture reduction systems, odour control mechanisms, and fully automatic operation. Just load the machine and forget it. Ready matured compost is simply taken out the next day.
  - Machine capacity: 100, 200, 300, 500, 600, 1000, 2000, 3000 kg per day.

Composting reduces overall organic waste being sent to the landfill by 80-95%. Compost helps the soil hold nutrients long enough for plants to use them. Saves money for you and your community in reduced soil purchases and reduced local disposed costs. Great for the environment.

MATERIAL RECOVERY FACILITY

RECOVERY OF RECYCLABLES FROM MUNICIPAL SOLID WASTE

Today's MSW management systems are highly integrated and include various options in materials collection, materials recovery, composting, combustion, and landfilling.

A Materials Recovery Facility (MRF) is where recyclable materials that are collected from households are sorted into different types (e.g., plastics, cardboard, paper, metal) using a mixture of manual and automated methods. When the materials have been sorted they are sent to reprocessors and manufacturers where they are used to create new products.

The main function of the MRF is to maximize the quantity of recyclables processed while producing materials that will generate the highest possible revenues in the market.

The mechanical sorting mechanisms and processes include: conveyors, trommel screens, sorting stations, ballistic screens, ferrous and non ferrous separators, optical sorters, bag breaker, and balers. Processing at the facility begins mechanically, becomes manually and then goes back to a mechanical process for final quality control. The result is unparalleled diversion and consistently cleaner product.

**MRF Includes:**
- Conveyor System
- Ferrous Metal Separation
- Screening
- Air Density Classification
- Non Ferrous Metal Separation
- Manual Sorting/Separation of Various Inputs
- Size Reduction
- Bailer and Compactor
SHREDDERS
LOW SPEED HIGH TORQUE SHREDDING TECHNOLOGIES
AVAILABLE IN HYDRAULIC & ELECTRICAL DRIVE OPTION

SINGLE SHAFT SHREDDERS
(50 KGS / HR. TO 5000 KGS / HR.)

Alfa Therm Single Shaft Shredder is used in recycling operations for the production of valuable secondary raw materials. Our shredders are powerful, very versatile and can be used for shredding of all kinds of input materials, well suited for different industries. The Single shaft shredder can reduce material to a particle size.

- Material is fed by means of a conveyor belt or manually across the entire width of the machine. Large number of cutting blades exerts the material between the rotor. The hydraulically/mechanically driven ram feeds the material to the rotor. A well dimensioned screen is installed in the lower part of the housing, which retains the material in the cutting chamber until it is discharged straight down out of the machine.
- This sturdy and compactly built machine is designed for the special requirements of modern recycling operations. It comes with the following features:
  - Excellent accessibility to the cutting chamber
  - No need of extensive adjustments inside the machine
  - Screen Frame is opened hydraulically/mechanically
  - Throughput range between 30kg/hr to 3000 kg/hr depending on the model, material type and application
  - Optimum performance in every application

TWIN SHAFT SHREDDERS
(50 KGS / Hr. to 10000 KGS / Hr.)

Alfa Therm Twin Shaft series Shredders are designed to operate at slower speeds, utilizing high torque and the tearing, crushing & shearing actions between counter rotating, opposing blades. This results in minimal power consumption and reduced noise as compared to other types of shredders, while still achieving high throughput rates and low maintenance costs.

Suitable for the size reduction of:
- Medical waste
- Municipal Solid Waste
- E-waste
- Pharmaceuticals
- Plastic
- Aluminium Cans and Bins
- Biomass
- Agricultural Waste
- Cardboard
- Containers
- Electrical wires
- FRP
- Hazardous waste
- Hotel/Kitchen waste
- Industrial waste
- Jute
- Laminates
- Oil Filters
- Tyres
- Pet Coke
- Packaging Waste
- Rubber
- Textile
- Vinyl
- Automobile waste
- Any other type of waste

- Double shaft shredders are robust and rugged machines
- Throughput up to 15 Tons/hr
- Less material preparation
- Safe to operate
- Very low vibration
- Lower dust and noise means a safer work environment
- Lower risk of projectiles ejected from the cutting chamber
- Longer life to the cutters and engine equipment
- Higher online reliability and lower power requirements