



ALLIED FURNACES PVT. LTD.

CORPORATE PROFILE

2019

OVERVIEW



- We started our journey in 1970 as a competent, professional and innovative supplier of Industrial Furnaces but were quick to realize the growing menace of hazardous waste pollution and soon diversified into the incinerator business
- We developed a range of incinerators using in-house design capabilities and since then developed various systems to handle all types of wastes – hazardous, tarry, liquid, solid or gaseous. Today we have installed over 150 incineration systems across India
- Through constant innovation, we have pioneered cutting edge technologies such as Drum Pyrolyzer, Zero Liquid Discharge and innovative Heat Recovery Solutions from our incinerators
- Our incinerators are designed to be economical, easy to operate and at the same time meet all the environmental norms set by the Pollution Control Boards. We have a team of professional engineers who are trained in all aspects of building incineration systems – from designing to commissioning
- In 2004, we forayed into the field of Common Hazardous Waste Incinerators and have had a successful run in this line as well by setting up numerous facilities across India for waste management companies.
- We have supplied our equipment to various industries in both private and public sector. A clear indicator of our performance over the past few decades has been the high number of repeat orders we have received from our clients and the continued cordial business relationship we enjoy with them

STRATEGY



VISION:

To be the industry leader in hazardous industrial waste management solutions and minimize the impact of said waste on the environment

CORE VALUES:

- Sustainable environment protection
- Customer comes first
- Innovation, Innovation, Innovation!
- Always maintain Transparency, Integrity and Business Ethics

MISSION:

To provide highest quality services and complete customer satisfaction using the latest technologies to reduce hazardous industrial waste disposal into the environment

GOALS:

- Reduce burden on land fills and become largest supplier of Incinerators in India
- Become a Leader in the field of hazardous industrial waste management
- Ensure Customer's success at all costs

PRODUCTS

- Single Drum Pyrolyser
- Spray Incinerators
- Rotary Kiln Incinerators
- Stationary Chamber Incinerators
- Recuperative Thermal Oxidizers
- Regenerative Thermal Oxidizers
- Spray Drier Absorber
- APCDs – To Meet Stringent PCB Norms
- Automation and Control



INDUSTRY SOLUTIONS



Common Hazardous Waste Incineration

Zero Discharge Scheme

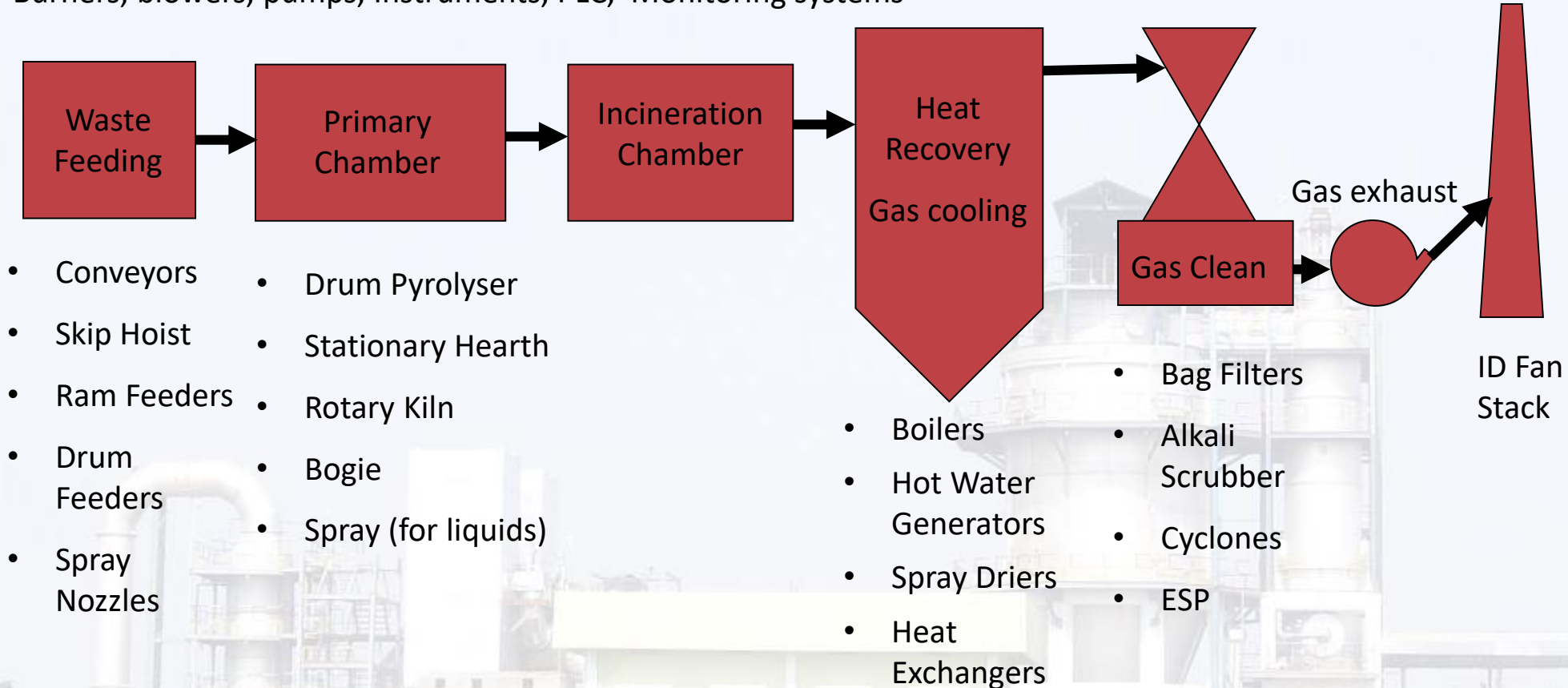


Air Pollution Control Devices

AFPL INCINERATOR BLOCK DIAGRAM



Burners, blowers, pumps, Instruments, PLC, Monitoring systems



WE PROVIDE THE ENTIRE PLANT

AFPL SOLUTIONS OFFERED



- **Incinerator Types**

- Rotary Kiln Incinerators
- Stationary Incinerators
- Bogie / Trolley Type Incinerator
- Drum Incinerators
- Liquid Waste – Spray Incinerators

- **Gas Cooling / Heat Recovery**

- Spray Driers / Quencher
- Boilers
- Recuperators
- Air-preheater

- **Gas Cleaning System**

- Cyclone
- Dry Scrubber
- Bag-filters
- Wet Scrubbers

- **Zero Effluent Discharge System**

AFPL INCINERATOR TYPES & SELECTION



Waste \ Capacity	Small quantity < 50 kg/hr	Medium quantity < 100 kg/hr	Large quantity > 150 kg/hr
Solids	Stationary	Bogie / Rotary Kiln	Rotary Kiln
Tarry Non-pump Able	Stationary / Drum Pyrolyser	Stationary / Drum Pyrolyser	Rotary Kiln
Sludge (Pump Able)	Stationary	Stationary	Rotary Kiln
Liquid with High Calorific Value	Stationary	Stationary	Spray Incinerator
Liquids with High Salt Content	Spray Incinerator	Rotary Kiln	Rotary Kiln
Gaseous	Stationary	Stationary	Thermal Oxidizer

Incinerators are custom built to suit the waste characteristics and quantities

AFPL ROTARY KILN INCINERATOR



AFPL LIQUID WASTE INCINERATOR



AFPL SOLID WASTE INCINERATOR



AFPL COMMON HAZARDOUS INCINERATOR FACILITY



AFPL LARGE INCINERATOR WITH HEAT RECOVERY





AFPL COMMON HAZARDOUS INCINERATOR

Client Requirement

- Common hazardous waste facility incinerator for mixed wastes from all types of industries
- Sophisticated, modern system satisfying all norms of CPCB

AFPL Solution

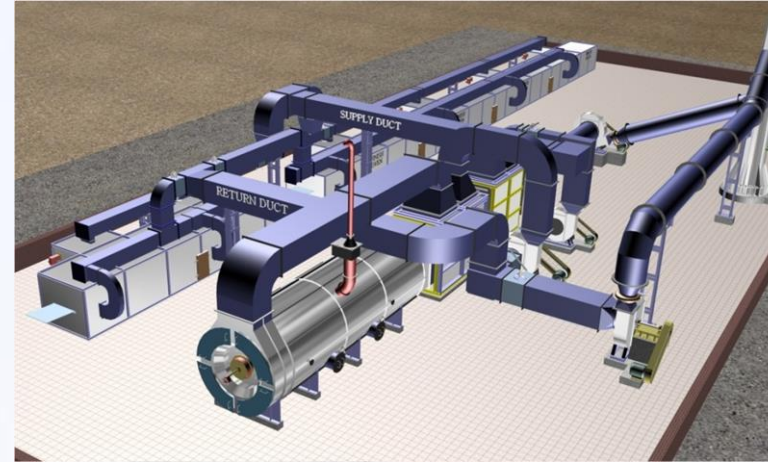
- Rotary Kiln Incinerator of total 1500 kg/hr capacity mixed waste
- Basic design by Alstom & Bundy USA, Re-engineered, manufactured, erected, and commissioned by us.
- Totally automated system
- Dry-scrubbing system with bag filter for dioxin and furan adsorption
- Wet scrubbing system
- First plant operational since October 2004
- Carefully monitored by the Pollution Control Boards
- Spray drier incorporated in subsequent plants for drying leachate and Zero Effluent Discharge
- 7 plants supplied to-date

AFPL THERMAL OXIDISERS



For gaseous wastes and VOCs

- Direct fired thermal oxidizer
- Recuperative thermal oxidizer
- Regenerative type thermal oxidizer



AFPL GAS CLEANING SYSTEMS



- Cyclones
- Bag-filters
- Dry scrubber
- Spray drier / evaporators
- Venturi scrubber
- Packed bed scrubber
- ID fan and stack



SAFETY & AUTOMATION

- PLC based system
- Critical interlocks for temperature, pressure, burners etc.
- Burner management systems
- Flame failure device
- Feed shut-off, emergency vent, emergency water provided
- VFD drives for ID fan
- Have implemented SIL-3 in incinerator
- On-line stack gas monitoring system



WestBengal Waste Management Project,Haldia

Process Parameters
Saturday, July 12, 2008 9:40:27 AM

Section	Chamber Temp.	Duct Temp.	Section	Temp.	Section	Pressure
SCF 101	36 °C	40 °C	SCF 101 INLET	360 °C	SCF 101	1.30 BAR(G)
SCF 102	1200 °C	27 °C	SCF 101 OUTLET	360 °C	SCF 110	1.30 BAR(G)
SCF 103	41 °C	100 °C	SCF 101 OUTLET	311 °C	SCF 111	1.30 BAR(G)
SCF 104	1100 °C	0 °C	SCF 101 INLET	170 °C	SCF 112	1.30 BAR(G)
SCF 105	360 °C		SCF 101 INLET	77 °C	SCF 113	1.30 BAR(G)
SCF 106	360 °C		SCF 101 INLET	77 °C		
SCF 107	360 °C		SCF 101 INLET	77 °C		
SCF 108	360 °C		SCF 101 INLET	77 °C		

Section	Chamber Temp.	Heater Temp.	Section	SPEED	Current
SCF 101 A	34 °C	0 °C	SCF 101	200 RPM	10 Amps
SCF 101 B	34 °C	0 °C	SCF 101	200 RPM	10 Amps
SCF 101 C	34 °C	0 °C	SCF 101	200 RPM	10 Amps
SCF 101 D	34 °C	0 °C	SCF 101	200 RPM	10 Amps



WHY ALLIED FURNACES PVT. LTD.?

- First Indian organization to commission Rotary Kiln Incinerators 20 years back, which are still operational
- Largest references of Rotary Kiln Incinerators in India
- Commissioned over 150 Incineration Systems so far with majority still in operation
- Innovative technologies such as Drum Pyrolyzers for drummed wastes
- First organization to integrate Spray Drier Technology with Incinerator for Zero Liquid Discharge and Scrubbing
- Customized solutions to suit each client's requirement
- First to set-up Common Hazardous Waste Incinerator in India
- Undertake O & M contracts for Incinerators



ADVANTAGES OF AFPL INCINERATORS:

- Operational Economy
- Low capital investment
- Minimal running cost
- Easy to operate
- Emissions controlled as per norms
- Lot of in-built flexibility
- Optimum Automation

TYPES OF WASTES HANDLED:

- Solid, semi-solid wastes
- Drummed tarry wastes
- Pumpable organic liquid waste
- Aqueous wastes
- Gaseous wastes, fumes and VOCs
- Trash garbage, municipal wastes
- Biomedical wastes

ACHIEVEMENTS SO FAR



- Installed base of around 150 medium and large systems for various types of industrial waste
- Installed 8 Common Hazardous Waste Incinerators for Ramky (with technical collaboration of Alstom and Bundy's)
- Installed India's largest capacity incinerator
- Online incineration systems for coating lines
- Special incinerators with heat recovery for VOCs and gaseous wastes
- Solutions provided for noble metal recovery, HCl recovery etc. thro' incineration





FOR MORE INFO.,

CALL: +91 22 42279900

MAIL: allied@alliedfurnaces.in

VISIT: www.alliedfurnaces.in