



THINK OF FUEL ECONOMY
THINK OF US



SOLID FUEL FIRED
THERMIC FLUID HEATER ▶



THE HIGH EFFICIENCY SOLID FUEL FIRED THERMIC FLUID HEATER



COMBUSTION TECHNOLOGY

Complete combustion of solid fuel is achieved by methodical mixing of fuel & air. Thus a self sustainable combustion temperature is ensured by adequate oxygen ingress to every particle of fuel.

Every solid fuel has different physical and chemical properties which influences the design and performance of the furnace in Thermal Fluid Heater. Different combustion systems are shown in above diagrams.

Low grade fuels are best handled using FBC technology to give good results. Thermotech's unique design for efficient combustion suits different solid fuels like coal, lignite, wood, husk, pet coke, bagasse and biomass fuels resulting in to low operating cost, trouble free operation and lesser maintenance.

THERMIC FLUID HEATERS - VERTICAL

The vertical four pass thermic fluid heater is suited for various industries across India and abroad in the rapidly changing and undependable energy environment. Thermotech's generous design of vertical heaters coupled with integral furnace and best suited combustion grate gives you an assurance of the rated output on any solid fuels like coal, wood, lignite, husk, briquettes, pet coke, saw dust, bagasse, etc. without compromising on performance & efficiency. This reduce downtime leading to further increase in profitability.

SALIENT FEATURES OF TFH

Furnace is designed for multi fuel options, with major thrust on proper selection of combustion grate, furnace height, combustion volume, fuel feeding system, to ensure efficient combustion & lesser heat loss.

Coils are designed with optimum flow consideration to gain maximum heat from flue gases. Coils are tested at 3 stages before final dispatch as a part of Thermotech's stringent quality control.

ID Fan, FD Fan & Booster fan (in any) are selected as per fuel's perfect air-fuel ratio requirement, which ensures optimum air quantity for combustion & thus saves power consumption.

Expansion Tank capacity is specifically selected after consulting total holdup of Thermic Oil. Deaeration Tank is specially designed considering flow & temperature requirement.

Thermotech offers complete solution of Thermic Fluid Heating System along with Pipeline, Pollution control equipments, fuel handling, etc on Turnkey Basis.



**Plc System With Scada
For Auto Operation**



**Heavy Coil
Integration**

AUTO CONTROLS AND SAFETIES : STANDARD

1. THERMIC FLUID TEMPERATURE CONTROL

Digital temperature indicator-cum-controller cut of ID/FD fan of preset temperature and restart of preset differential temperature to maintain system temperature.

2. STACK TEMPERATURE CONTROL

A blind temperature controller cut of ID/FD fan and sound alarm if stack temperature exceeds to preset temperature.

3. LOW/NO FLOW OF THERMIC FLUID

Differential pressure switch connected across inlet and outlet headers signals low flow alarm in case of low fluid pressure of thermic fluid in coils.

4. LOW LEVEL OF THERMIC FLUID

The visual level indicator and float actuated lever switch fitted in expansion tank signals alarm in case of low level thermic fluid in the system.

5. THERMIC FLUID PUMP MOTOR TRIP

In case of thermic fluid pump motor trip, electrical interlocks cut off ID/FD fan.

6. POWER FAILURE

Diesel Engine drive keeps thermic fluid moving in the system to prevent its degradation and overflow.

7. EXCESS FURNACE BED TEMPERATURE

Digital temperature indicator-cum-controller senses furnace bed temperature and cut off ID/FD fan above set value (for FBC unit).

OTHER COMBUSTION GRATES

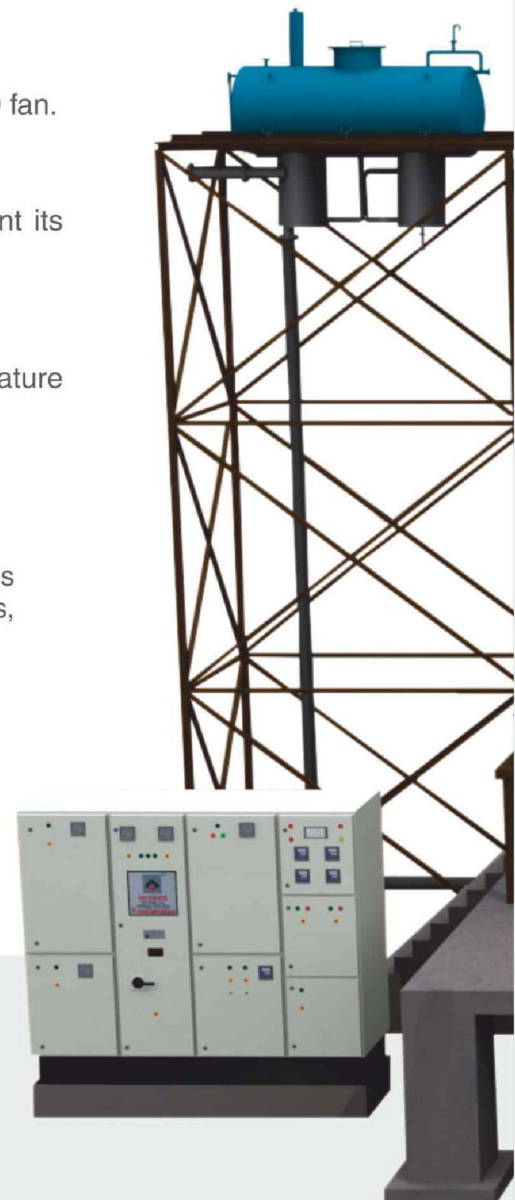
Thermotech's TFH are designed to accommodate many other combustion grates like Dumping Grate, Pulsating Grate, Traveling Grate, Under bed Nozzle grates, etc. as per fuel suitability to be fired in Furnace efficiently.



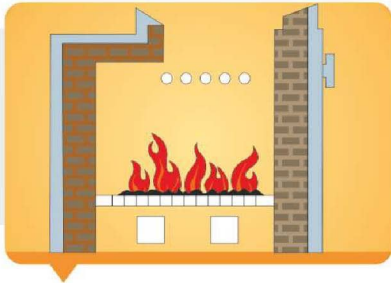
**Skid Mounted Inlet /
Outlet Piping System**



**Efficient Combustion
On All Fuels**



MODEL



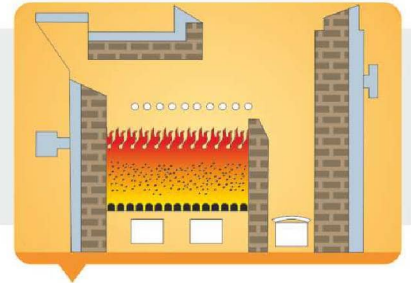
TSCV

Stationary Grate Combustion Technology is best suited for fuels like Wood waste, coal, lignite, briquettes, etc with manual feeding into furnace.



TSAW

Stationary Grate Combustion Technology with Auto Feeding is best suited for fuels like Wood chips, briquettes, Agrowaste with manual feeding into furnace & paddy husk, saw dust, etc with Auto feeding by screw feeder.



TSFB

Fluidised Bed Combustion Technology is best suited for fuels like low grade coal, imported coal, paddy husk, petcoke, pellets, etc with Auto feeding system of Over bed & Under bed into Furnace

BENEFITS

MULTI-FUEL OPTION
LOW POWER CONSUMPTION
ENERGY OPTIMIZATION
LOW MAINTENANCE



MULTI FUEL OPTIONS



Briquettes



Saw dust



Groundnut shell



Bagasse



Petcoke



Rice husk



Palm waste



Lignite



Coffee husk



Coal



Rice straw



Coconut waste



Mustard straw



Cotton stalk



Wood Chips

APPLICATION OF THERMOTECH PRODUCT



Chemical | Plywood (MDF, Particle Board, Laminates) | Latex | Textile & Technical Textile | Auto Mobile
| Paint | Food & Beverage | Rubber | Pharma | Leather & Vinyle | Paper | Printing & Lamination
Auto Mobile Solar | Heating System | Oil & Gas Processing | Printing & Lamination

THERMOTECH'S WIDE RANGE OF HEATING SOLUTION ENVELOPE



Thermic Fluid Heater
Oil / Gas fired - up to 15 M Kcal/hr



Thermic Fluid Heater
Solid fuel fired - up to 15 M Kcal/hr



Hot Water Generator
Oil / Gas fired - up to 15 M Kcal/hr



Crude Oil Heater
Oil / Gas fired - up to 3 M Kcal/hr



Hot Water Generator
Solid fuel fired - up to 15 M Kcal/hr



Hot Air Generator (Direct)
Solid fuel fired - up to 8 M Kcal/hr



Hot Air Generator (Indirect)
Solid fuel fired - up to 8 M Kcal/hr

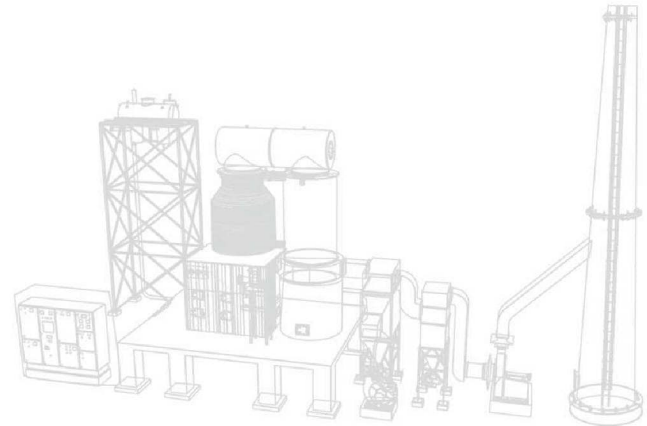


Water Bath Heater
Oil / Gas fired - up to 2 M Kcal/hr



Gasifiers
RDF, Coal, Agrowaste - up to 10 M Kcal/hr

For Above Systems
OIL / GAS / SOLID FUEL



OUR VALUED CLIENTELE

IFFCO | Reliance | Emami Group | Raymonds | Adani Group | HUL | Reckitt-benckiser | Pepsico | Godrej L&T | Hayley's Group | VVF Ltd. | Finlays | KS Oils | Ruchi Soya | Dokuboy | Shell India | NTC | GPS Green Ply | Metro Group | DNO Middle East | Ansell Group | Uflex | BASF | Balaji Wafers | Yash Paper | Roha Dyes

OUR BUSINESS ASSOCIATES

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