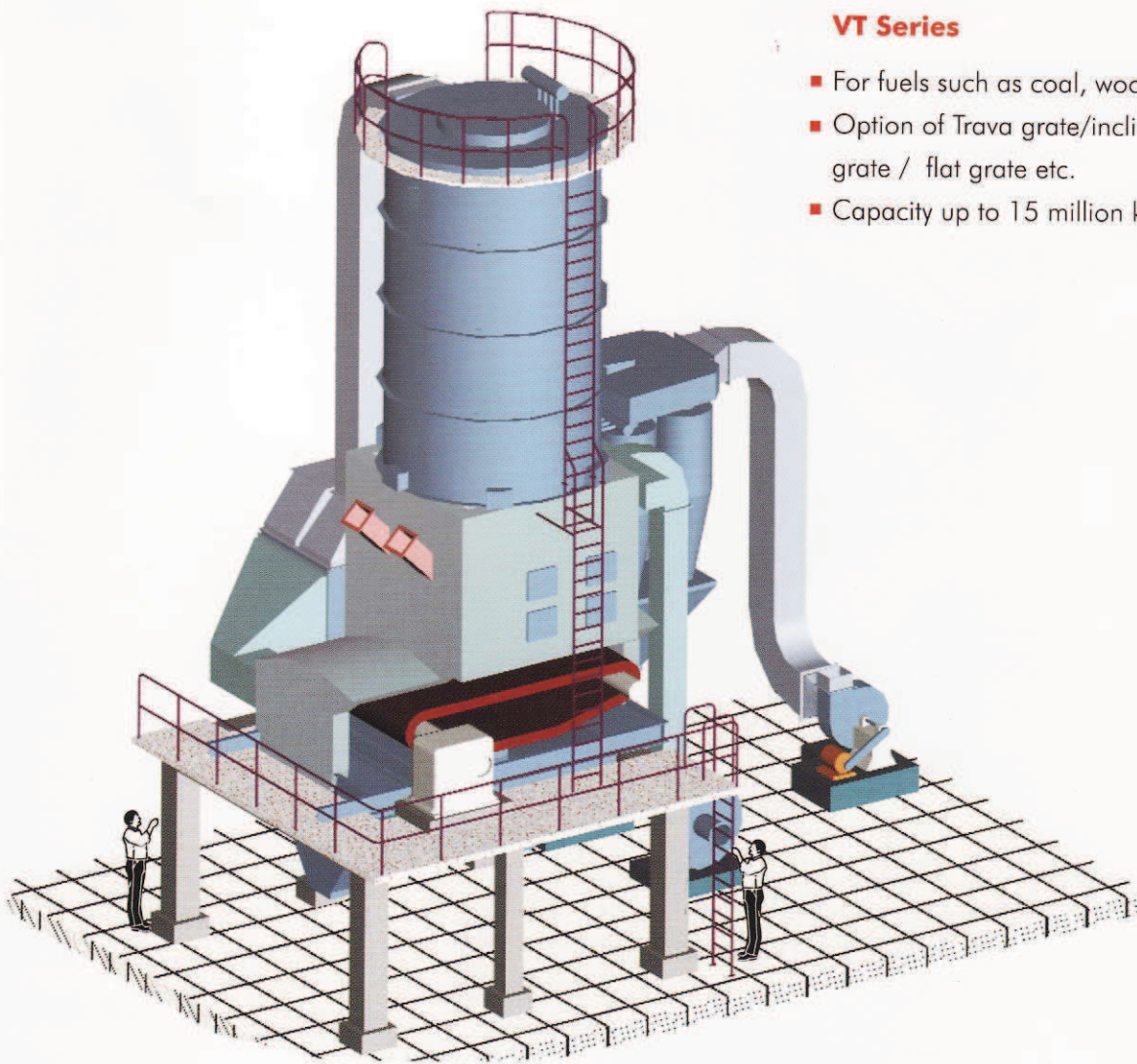


# Biomass / Solid Fuel Fired Thermal Oil Heater



## VT Series

- For fuels such as coal, wood, sawdust baggase, etc.
- Option of Trava grate/inclined water cooled grate / flat grate etc.
- Capacity up to 15 million kcal/hr

## Annual Savings with Solid Fuel Deltatherm

Operating cost comparison for Furnace Oil Fired Heater v/s Wood Fired Heater		Sample Calculation	
		Wood Fired Thermal Oil Heater	Oil fired Thermal Oil Heater/boiler
Parameter		Option I	Option II
Fuel		WOOD	OIL
Fuel calorific value	kcal/kg	3500	9650
Capacity of Thermal Oil heater	kcal/hr	1,000,000	1,000,000
Efficiency of Heater	%	70%	88%
Fuel Consumptions	kg/Hr	408	118
Storage and handling losses for fuel	%	15%	1%
Nos. of operators for handling the fuel & Heater operation		2	Nil
Average fuel cost	US\$/MT	40	400
Electricity cost	US\$/kW	0.1	0.1
Manpower cost	US\$/Day	10	
Fuel cost /hr	US\$/hr	16.33	47
Additional electricity incase of wood fired heater	US\$/hr	3	Nil
Manpower cost	US\$/hr	2	Nil
Total hourly operating cost	US\$	22	47
Annual operating cost (7200 Hrs running time)	US\$	157151	339143
Other expenses like handling and maintenance etc per year	US\$	10000	1500
Total yearly expenses	US\$	167151	340643
<b>Savings per year with wood firing</b>	<b>US\$</b>	<b>173492</b>	