

# TURBOCOIL

Industrial Thermal Fluid Heaters



# HY SERIES HEATER

## TURBOCOIL EFFICIENCY

The superior high efficiency design of the General Combustion Turbocoil Heaters outperforms competitive units in all types of process applications. The close-wound helical coil design of the General Combustion Turbocoil Hot Oil Heaters eliminates the poor oil circulation problems experienced with other designs. Coking, sludge, hot spots, and burnouts are prevented. In addition, low stack temperatures mean the heat is going into the oil, not up the stack.

The expansion tank is mounted remote from the heater so in normal operation, it is at ambient temperature. This permits the use of light heat transfer oils resulting in lower pumping costs and better heat transfer. It is also safer; chances of fire are greatly reduced.

By contrast, heaters with expansion tanks mounted directly on top require high flash point oil, which is more difficult to circulate at ambient temperatures. Heaters are available for vertical, horizontal, and underground tanks in steel, stainless steel, nickel, and other materials designed to meet specific job requirements, large or small.

In installations where General Combustion heaters replaced competitive units, owners have saved an average of 60% on energy costs.

Just look at these General Combustion advantages:

- High Efficiency
- No sludge, corrosion, dead spots, or burnouts
- Easy installation, fill, and maintenance
- Energy saving low pressure operation
- Single power supply
- UL/FM/IRI/CSA Fuel Trains available
- Factory tested for optimum performance
- Low NOx burners available

Five-year helical coil warranty available

In many cases, General Combustion units have replaced larger competitive units and outperformed them in every way. Turbocoil Hot Oil Heaters from General Combustion are available in sizes and prices to meet your plant and budget requirements.



The industry's best choice for the most efficiently operating thermal fluid heater is the HY series. HY heaters incorporate the basic, sound design features of General Combustion's other well-established models, only in a smaller, more economical package. Skid-mounted for easy installation, HY heaters are suitable for either indoor or outdoor applications. HY heaters are capable of utilizing natural gas, LP gas, No. 2 fuel oil, or combination fuels. HYF series heaters are available with an increased "high flow and high temperature" oil system.



HY SERIES SPECIFICATIONS						
MODEL	INPUT M/BTU/hr	OUTPUT M/BTU/hr	DIMENSIONS			SHIPPING WEIGHT (lbs.)
			Length	Width	Height	
HY-70	700,000	595,000	9'6"	5'0"	7'7"	3,250
HY-100	1,000,000	850,000	9'6"	5'4"	7'7"	3,765
HY-200	2,000,000	1,700,000	14'0"	5'4"	7'7"	5,490
HY-280	2,800,000	2,380,000	14'0"	5'4"	7'7"	6,915



# MKVGO SERIES HEATER

General Combustion's MKVGO Vertical Heaters are designed specifically for high temperature terminal applications where space is limited. Because of the unique design of the MKVGO Vertical Heater, conventional fuels as well as heavy waste oils and recycled fuels can be burned without fear of coking, sludging, or damage to the coil. Heavy fuel oils have the greatest BTU energy content and are also some of the most inexpensive fuels available. The unique "Ash-Out" heater design eliminates the problems associated with burning of these types of fuel oils and allows the highest energy efficiency to maximize the caloric value of the fuel. Rugged I-Beam design coupled with a high-efficiency helical coil and a fully insulated exterior skin, make the MKVGO Vertical Heater the ideal choice for Terminal Operators and Waste Oil Recyclers.



## MKVGO SERIES SPECIFICATIONS

MODEL	INPUT M/BTU/hr	OUTPUT M/BTU/hr	DIMENSIONS			SHIPPING WEIGHT (lbs.)
			Length	Width	Height	
MKVGO-340	3,400,000	2,900,000	17'	7'	7'	14,300
MKVGO-600	6,000,000	5,200,000	10'	10'	16'	36,000
MKVGO-750	7,500,000	6,400,000	10'	10'	17'	37,500
MKVGO-1000	10,000,000	8,500,000	10'	10'	18'	38,500
MKVGO-1250	12,500,000	10,300,000	10'	10'	19'	40,000
MKVGO-1500	15,000,000	12,800,000	11'	11'	20'	48,000
MKVGO-1750	17,500,000	14,800,000	11'	11'	22'	52,000
MKVGO-2000	20,000,000	17,000,000	12'	12'	24'	61,000

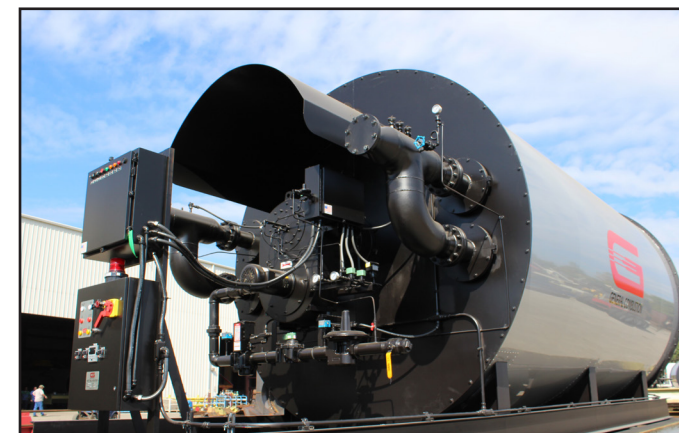
# HYT SERIES HEATER

General Combustion's Twin-coil HYT heaters are designed for high temperature industrial process applications. Designed with twin close-wound helical coils, the HYT heater provides greater thermal efficiency in a small compact package for limited space applications. In addition, the internal use of a ceramic fiber blanket on the heads, in place of cast refractory, greatly reduces weight and the expense of maintaining castable refractory. Built to provide years of dependable service, its design protects it from the rigors of process industry applications. Suitable for use with a wide range of fuels and thermal fluids, the General Combustion's HYT is the most versatile and efficient heater available anywhere.



## HYT SERIES SPECIFICATIONS

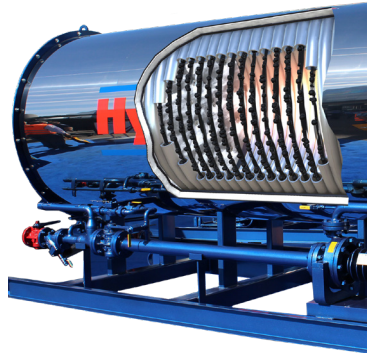
MODEL	INPUT M/BTU/hr	OUTPUT M/BTU/hr	DIMENSIONS			SHIPPING WEIGHT (lbs.)
			Length	Width	Height	
HYT-340	3,400,000	2,900,000	11'	7'	8'	14,300
HYT-500	5,000,000	4,200,000	12'	8'	9'	15,500
HYT-750	7,500,000	6,400,000	13'	9'	10'	29,800
HYT-1000	10,000,000	8,500,000	22'	10'	11'	32,100
HYT-1250	12,500,000	10,625,000	28'	11'	12'	55,800
HYT-1500	15,000,000	12,800,000	27'	11'	12'	64,200
HYT-2000	20,000,000	17,000,000	30'	12'	13'	66,500
HYT-2500	25,000,000	21,300,000	33'	13'	14'	76,200
HYT-3000	30,000,000	25,500,000	35'	14'	15'	88,900



# HEATER FEATURES & ADVANTAGES

## RAPID ENERGY-ABSORBING, TURBOCOIL DESIGN

- ASME stamped heater coil (optional)
- Every heater is thoroughly fire tested
- Maximum radiant energy absorption
- Helical coil is removable for easy maintenance
- Large combustion volume and low heat flux rates assuring long fluid life
- Precise coil/shell gapping producing even distribution airflow for maximum thermal efficiency
- Helical coil hydrostatically tested with oil, to 400 PSIG (ten times normal working pressure)



## SUPERIOR INSTALLATION

- Stack extension (optional)
- External insulation preventing heat loss from the shell for maximum energy conservation
- Internally insulated with multi-level cast refractory

## BURNER



- UL rated industrial complete packaged burner
- All necessary fuel control valves
- Mounted, piped, and wired
- Spark ignition and flame safeguard
- IRI, FM, CSA, or CGA fuel trains
- Specialized ratings also available
- Capable of using natural gas, LP gas, or commercial grades of fuel oil

## REMOTE EXPANSION TANK



- ASME code expansion tank (optional)
- Transfer oil remains at ambient temperature
- Minimizes oxidation and sludge
- Prevents cold areas by maintaining positive pressure on system at all times
- Rapidly removes vapors
- Reduces fire hazards
- Capable of using ultralight transfer oils with cleaning agents for ease of start-up and operation
- Expansion tank blanketing system (optional)
- Hot oil filter for system clean-up (optional)

## AUTOMATIC CONTROLS



- Status lights for troubleshooting with indicators for fuel on, pump running, lock-out, stack switch, flow switch, over-temperature control, and low liquid level
- Terminals for remote alarm
- Designed for safety, easy operation, and service
- 7-day programmable time clock

## CENTRIFUGAL PUMP

- API seventh edition pumps
- Specifically engineered for thermal fluids
- Duplex pumping units (optional)
- Mechanical seals to prevent leaking
- Reduced horsepower requirements
- 600°F air-cooled for high heat applications
- Higher flow rate/less temperature fluctuation
- ANSI Flanges



## E-Z FILL SYSTEM

- Unique system allows ease of filling and unloading of transfer oil

## AIR ELIMINATOR

- Air eliminator for rapid removal of vapor from the system
- FP-1 Filter package (optional)





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