TRADITION OF EXCELLENCE

ESTABLISHING A TRADITION OF EXCELLENCE TAKES HARD WORK, COMMITMENT, AND DEPENDABLE PRODUCTS—WHAT GENERAL COMBUSTION HAS BEEN DEDICATED TO FROM THE BEGINNING.


SERVING BOTH THE INDUSTRIAL AND ASPHALT MARKETS, HY-WAY THERMAL FLUID HEATERS HAVE BEEN PROVEN DEPENDABLE, HIGHLY EFFICIENT, AND RUGGED IN HUNDREDS OF INDUSTRY APPLICATIONS THROUGHOUT THE WORLD. FROM ASPHALT TO PETROCHEMICALS, FROM FOOD PROCESSING TO TEXTILES, GENERAL HAS MAINTAINED A REPUTATION OF QUALITY AND RELIABILITY.

TODAY, GENERAL COMBUSTION CONTINUES THIS TRADITION OF EXCELLENCE WITH INNOVATIVE TECHNOLOGY, EXPERIENCED STAFF, AND APPLICATIONS TO MEET THE NEEDS OF THE EXPANDING MARKET.

FEATURES AND 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 cold shell/gapping preventing even distribution airflow for maximum thermal efficiency
- Helical coil hydrostatically tested with oil, to 400 PSI (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

POSITIVE DISPLACEMENT PUMP
- Low speeds ensure years of dependable performance
- Virtually leak-free Graphite packing
- Flanged for easy servicing
- Forced oil circulation
- Controlled positive flow
- Heavy-duty pump and motor

SURE-FIRE 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 CSG fuel trains
- Specialized ratings also available
- Capable of using natural gas, LP gas, or commercial grades of fuel oil, methane, or waste 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)

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
- PP-1 Filter package (optional)

REMOVABLE HEADS
- Easy access for inspection or cleaning
- Heat exchange surfaces can be cleaned with high pressure water without draining thermal fluid or damaging the insulation
- All metal construction to eliminate corrosive attack problems associated with residual fuel firing on heaters with internal fiber insulation
- Hinging available (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 horsepowers requirements
- 80°F air-cooled for high heat applications
- Higher flow rate/less temperature fluctuation
- ANSI Flanges
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 80% 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/GSA 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.
**MKVO SERIES**

General Combustion’s MKVO Vertical Heaters are designed specifically for high temperature terminal applications where space is limited. Because of the unique design of the MKVO Vertical Heater, heavy waste oils and recycled fuels can be burned without fear of coining, 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 MKVO Vertical Heater the ideal choice for Terminal Operators and Waste Oil Recyclers.

**HEAVY FUELS**

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<th>SHIPMENT WEIGHT Lbs.</th>
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**HYT SERIES**

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.

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<tr>
<th>MODEL</th>
<th>INPUT M/Btu/hr</th>
<th>OUTPUT M/Btu/hr</th>
<th>LENGTH</th>
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<th>SHIPMENT WEIGHT Lbs.</th>
<th>SHIPMENT DATE (w. L)</th>
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