

# PRODUCTS

## FOR CONCRETE PRODUCERS



Heatec products for the concrete industry include:

- Direct-contact water heaters
- All weather portable units
- Hot oil heaters for heating aggregate stockpiles.
- Heating coils
- Direct-fired tanks to heat and store hot water
- Fuel storage tanks

Our heating products allow ready-mix concrete producers to extend their working season into cold-weather months by making concrete mixes that are much warmer than ambient temperatures.

Our water heaters preheat mix water. Our hot oil heaters preheat the aggregate stockpiles before the aggregate is introduced into the mix. A chiller can be included on portable units to cool mix water during hot summer periods.

All of our heating products were designed by Heatec and are produced at the Heatec facility in Chattanooga, Tennessee.

# HEATEC

# DIRECT-CONTACT WATER HEATERS

The *Firestorm* heater is Heatec's most popular product for concrete. It is a direct-contact water heater with extremely high thermal efficiency: up to 99 percent.

It can heat mix water up to 185 degrees F at flow rates up to 1,200 gpm, depending on heater size and cold water temperature. Heaters providing higher temperatures and flow rates are available on special request.

These heaters have the capacity to heat the mix water as it is used. This eliminates the need for separate tanks to store and maintain hot water.

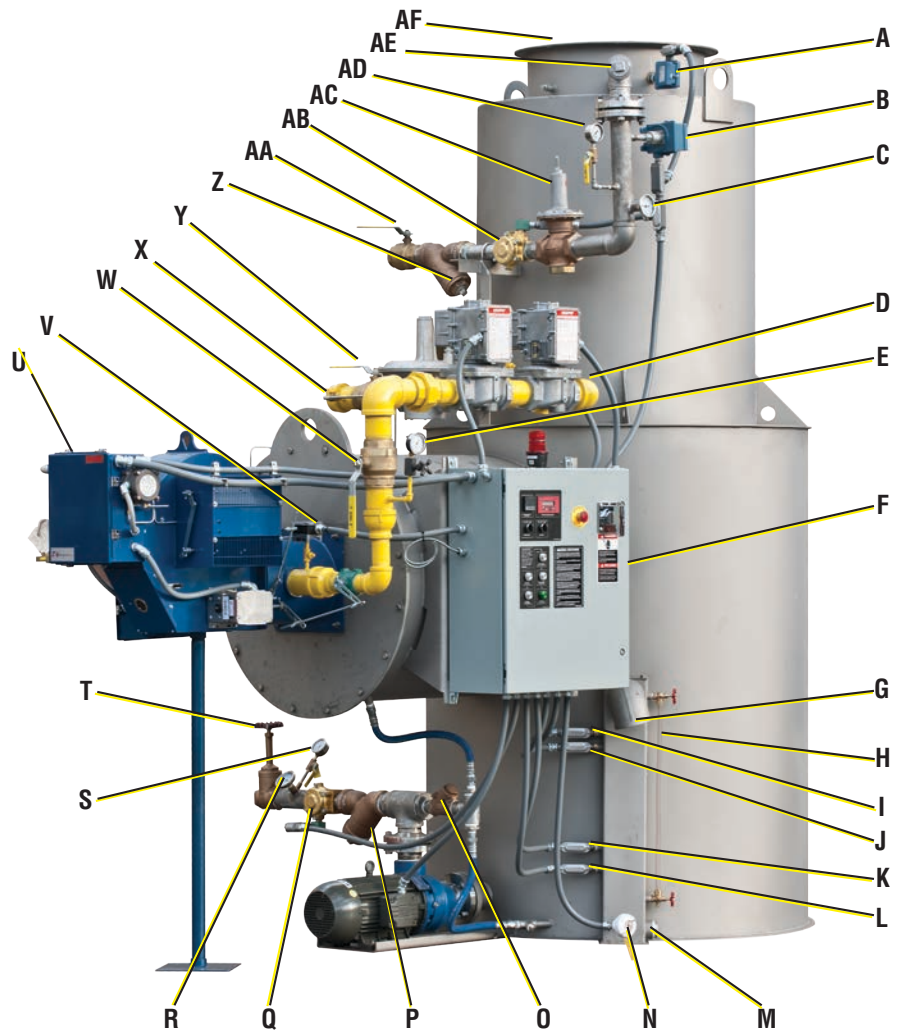
However, a *Firestorm* heater can be combined with an existing direct-fired tank so the tank becomes an extra source of heated water. Or a small unheated tank (about 1,000 gallon capacity) can be used for surge demands if needed.

*Firestorm* heaters are available in a wide variety of heating capacities ranging from 0.75 to 14 million Btu/hour. The heaters burn natural gas or propane.

*Firestorm* heaters mounted on trailers for portability are also available.



For more information on *Firestorm* heaters, please see Heatec Publication No. 12-08-207, entitled: *Firestorm Direct-Contact Water Heaters*.



## FIRESTORM® WATER HEATER

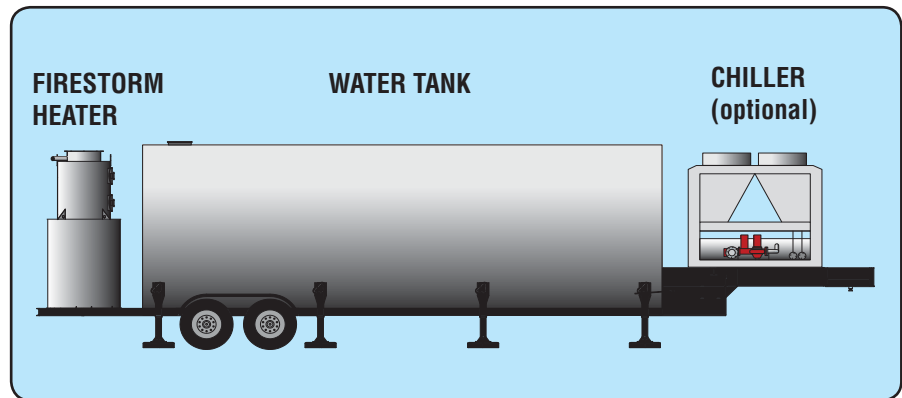
- |   |                                    |
|---|------------------------------------|
| A. Stack temperature switch                       | Q. Automatic outlet water valve    |
| B. Inlet water pressure switch                    | R. Outlet water temperature gauge  |
| C. Inlet water temperature gauge                  | S. Outlet water pressure gauge     |
| D. Low gas pressure switch (not visible in photo) | T. Manual outlet water valve       |
| E. Gas pressure gauge                             | U. Burner                          |
| F. Control panel                                  | V. High gas pressure switch        |
| G. Overflow connection                            | W. Manual gas leak test valve      |
| H. Water level indicator                          | X. Pilot gas valve                 |
| I. High-high water level switch                   | Y. Manual gas shut off valve       |
| J. High water level switch                        | Z. Inlet water Y-strainer          |
| K. Low water level switch                         | AA. Manual inlet water valve       |
| L. Low-low water level switch                     | AB. Automatic inlet water valve    |
| M. Drain connection                               | AC. Inlet water pressure regulator |
| N. Thermocouple                                   | AD. Inlet water pressure gauge     |
| O. Check valve                                    | AE. Secondary water connection     |
| P. Outlet water Y-strainer                        | AF. Exhaust stack connection       |

# ALL-WEATHER PORTABLE UNIT

An all-weather package is available. It combines a Firestorm heater, a chiller and a water storage tank into a single unit. It can be either stationary or portable.

Portable units are installed on a trailer chassis with wheels and suspension. Stationary units are installed on a skid.

Other combinations are also available.



## HOT OIL HEATERS

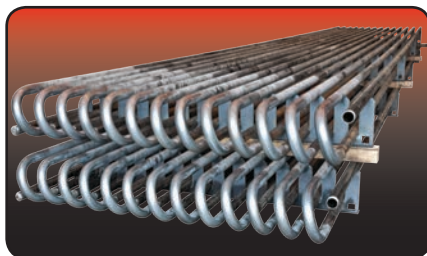
Heatec has designed and manufactured hot oil heaters for the hot mix asphalt industry since 1977. Their use in the concrete industry is mainly for preheating tanks of mix water and for preheating sand and/or aggregate.

Hot oil from the heater can be pumped through heating coils in aggregate bins or through coils in the area beneath stockpiles of sand or aggregate. Heat from the coils migrates upwards into the aggregate raising its temperature well above the ambient temperature.

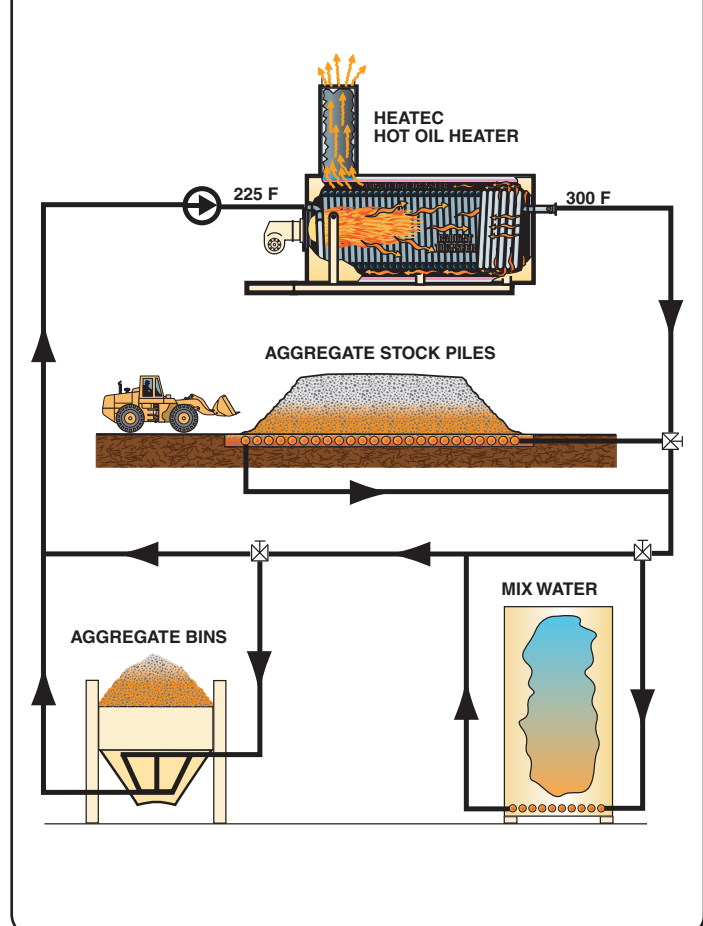
Heatec hot oil heaters are available with outputs from 1 to 4 million Btu/hour. A 1-million Btu/hour heater can raise the temperature of 100 cubic yards of aggregate 40 degrees F in 8 hours. A 4 million Btu/hour heater can raise the temperature of 100 cubic yards of aggregate 40 degrees F in 2 hours.

For more information on this product, please see Heatec Publication 11-06-181, entitled: *Helical Coil Heaters For Hot Mix Asphalt*. Also see Heatec Bulletin 1-03-095, entitled: *Peoria ready-mix producer beats the cold weather*.

Heatec makes heating coils for heating water and other materials using hot oil. They are available in a wide variety of sizes and configurations and can be customized for virtually any application.



ONE HEATEC HOT OIL HEATER  
CAN PROVIDE ALL THE HEAT NEEDED  
FOR MAKING CONCRETE IN COLD WEATHER



# DIRECT-FIRED TANKS

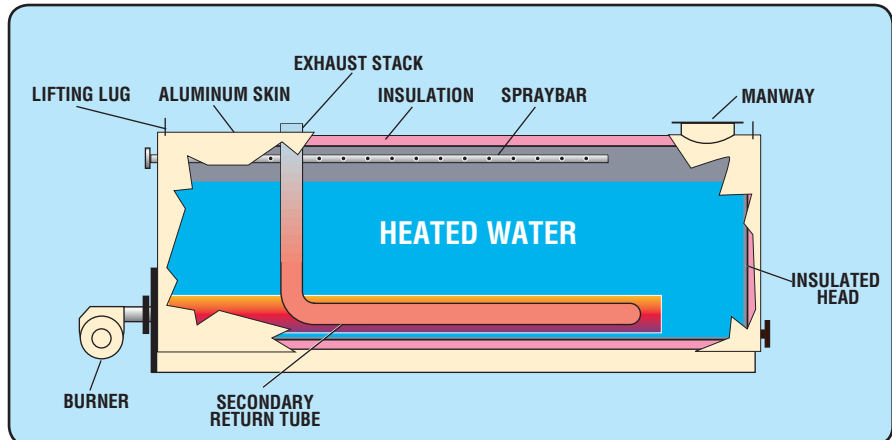


A direct-fired tank is the traditional way to heat mix water. It combines a burner and fire tube with a fully insulated storage tank. Heatec direct-fired tanks are economical.

They are available in six sizes with capacities from 10,000 to 35,000 gallons. They are available in stationary or portable configurations.

Although direct-fired tanks are not as fuel-efficient as our Firestorm heaters, they can operate on diesel fuel. That could make it a good option.

The burner on a direct-fired tank fires



into a single fire-tube that runs the length of the tank and doubles back inside the tank. As an option, more heating surface can be attained by using two tubes that double-back. The extra tube increases thermal efficiency.

Direct-fired tanks are capable of heating enough water to produce up to 300 yards of concrete an hour,

depending on the size of the tank and burner.

For more information on this product, please see Heatec Product Sheet 2-00-049, Rev 6-27-00, entitled: *Direct-Fired Tanks For Heating Water To Make Concrete*. Also see Heatec Bulletin 11-97-018, entitled: *Heated water enables ready-mix concrete producer to run the year around*.

# FUEL TANKS

Heatec makes a wide variety of fuel tanks, with the following options:

- Vertical or portable
- Capacities 6,500-25,000 gallons
- Leak protection
- Heated and insulated
- Meet UL-142 standards

For more information on fuel tanks, please see Heatec Product Sheet 8-08-203, entitled: *Fuel Heating and Storage Systems*.



Heatec manufacturing facility in Chattanooga, Tennessee.



# HEATEC

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