

## What type of heater should I put on my pool?

Here are the basics of the three types of heaters that are effective up here in the Northeast.

Natural Gas: Natural gas is the most popular in our area as most houses either in the cities, towns, or suburbs have it available. The upfront cost can be considerably less than a heat pump, depending on the location of the gas meter in proximity to your pool equipment. We usually size a gas heater to get about a 1° per hour rise in temperature. For example, if your pool is at 72° and you want it to get to 82° it would take approximately 10 hours to do so. We refer to this as "Rate of Rise". Being that gas heaters are not weather dependent for maximum performance they are a great choice to "Spot Heat" and to extend the pool season. So the most efficient way to use a gas heater is to turn it up when you want to use the pool and turn it off or way down when the pool is not in use.

Propane: Propane heaters are by far the most expensive to operate as the gas has to be delivered by truck to tank(s) on site. Propane should only be used if natural gas is not available and you do not want to consider a heat pump. If your whole house is run on propane than the price per gallon can be considerably less and propane could be the right choice for you. Overall a propane heater will function the same as natural gas.

Heat Pumps: Heat Pumps are extremely efficient and can save a lot of money over time depending on what type of swimmer you are. A heat pump works similarly to an air conditioner only in reverse. With a Heat Pump the "Rate of Rise" is heavily dependent on the weather. For example, if it is 85° outside you may be capable of gaining 10° or more in a single day. If it is only 45° you may have a difficult time achieving any temperature increase at all. So the trick with a Heat Pump is to set it at your favorite temperature and leave it, we call this "Set and Forget". If you are a seven day a week swimmer and you want your water to be at 84° all of the time then a heat pump will pay for itself relatively quickly.

To sum it up here are the pros and cons of each type of heater;

### Natural gas:

Pros- Great for spot heating, not weather dependent, low initial investment (particularly if it is a replacement heater and you already have a properly sized gas line), very effective heating when used properly.

Cons- When used in a "Set and Forget" manner can be quite costly. They also use a copper heat exchanger which is more susceptible to damage from poor water chemistry (low pH and alkalinity) than a titanium heat exchanger which is used in heat pumps.

### Propane:

Pros- Effective at spot heating, not weather dependent, installation cost can be even less than Natural Gas.

Cons- The overall cost of heating using propane is more expensive than the alternatives. Uses a copper heat exchanger that is susceptible to damage from poor water chemistry.

#### Heat Pumps:

Pros- By far the most energy efficient of the three types, excellent for "Set and Forget", generally require very little maintenance, can provide a significant payback in energy costs. They also use titanium heat exchangers that are highly resistant to poor water chemistry.

Cons- Initial investment is usually quite more, less capable of achieving a quick "Rate of Rise", not recommended for spot heating especially in cold weather.

For additional information or help making the best decision for you, please contact Gene at Ext. 218, or for new pool installations please contact your salesman.