

# SPASA FACT SHEET No 5

## GAS POOL HEATING.....

---

---

The ideal temperature for leisure swimming is around 25 to 26 degrees Celsius. This temperature is very rarely achieved naturally. For most of the swimming season, the normal water temperature would be around 18 to 20 degrees. Most of the temperature gained during the day is lost overnight, leaving the pool cold again in the morning.

Gas heating can quickly and efficiently heat your pool to a comfortable temperature for swimming whenever it is required. This means you can extend your swimming season for as long as you like, thus increasing the return on what was probably a fairly large investment in your pool.

The increased availability of natural gas and LPG has made it a popular form of swimming pool heating. The fact that it is always available and can be closely regulated makes it ideal for use on pools and spas where particular temperatures are required.

### HEATER RATING (SIZING)

Gas heaters have an input rating which is expressed in Megajoules (MJ), which is a measure of fuel energy consumption, and an energy output rating expressed in Kilowatts (kW). The smaller heaters are in the range of 60 to 100 MJ with larger heaters ranging through 250 up to 400 MJ. The output of heaters will range from 25 to 100 kW.

### WHAT SIZE HEATER DO YOU CHOOSE?

Selecting the right size heater depends on a number of factors. The size of the pool and/or spa. The maximum temperature you would like to achieve and the heat up time required.

When determining the size of the pool, consideration must also be given to whether or not the heater is required to heat the spa as well as the pool. Most people want to be able to heat their spa quickly and to a much higher temperature than the pool, so a heater should be selected with this in mind. If it is only the pool to be heated, remember, it does not really matter if it takes a little longer and also the temperature rise\* will be less, so perhaps a smaller heater could be considered. The points to remember are;

- Amount of water to be heated (in Litres)
- The temperature you wish to achieve
- How long you are prepared to wait

\* "Temperature rise" is the difference between the ambient or cold water temp and the required temperature

---

## CONTROLS

It is preferable that all gas heaters be fitted with thermostatic controls. However, heaters connected to spas **must** have a thermostatic control with a maximum set temperature of 40 degrees.

Again there are various levels of controls available, with some heaters being fitted with in-built timeclocks and other even more sophisticated controls. Choose the one that best suits your budget but also consider your lifestyle and the way in which you intend to use your pool and/or spa. Don't overlook the possibility of obtaining some long term benefits from a short term cost.

## INDOOR OR OUTDOOR INSTALLATION

Gas heaters come in a number of configurations to suit particular installations. Be sure the heater you select is the one most suitable for your requirements. ie: Heaters to be installed indoors require special fluing and may require additional ventilation specifically designed to suit the size and type of heater to be used. Heaters designed to be placed outdoors should not be used inside without the appropriate flue or the manufacturers consent.

<p><b>Safety note:</b> Chemicals must not be stored in the same room as a gas heater. Spa blowers must be located a minimum of 1.5 m from a gas heater.</p>
---

Whilst most gas heaters these days are designed and constructed to last along time in all conditions, consideration should always be given to protecting the heater from the elements. Heaters should always be installed on a stable, non-combustible base, preferably a minimum of 50mm above ground level.

**Warning:** When gas heaters are used on salt chlorinated pools, care should be taken to ensure the production of chlorine is adjusted to suit either the spa or the pool, as internal components could be damaged by excessive salt or chlorine levels. This is particularly important when operating for extended periods during heat-up.

## COST EFFECTIVE AND CONVENIENT

Gas pool and spa heaters are cost efficient and relatively inexpensive as far as running costs are concerned. They provide the added convenience of being instantly available whenever you decide to heat the pool or spa. By utilising thermostatic control, the temperature of your pool can be maintained at the level you select, despite the weather conditions.

Using a gas heater to boost a solar heating system can also extend the swimming season and using a pool blanket will reduce operating costs.

<p>For more information on heating see Fact Sheet No 3. SOLAR POOL HEATING, Fact Sheet No 6. POOL BLANKETS and Fact Sheet No 7. HEAT PUMPS.</p>
---

For further information on building, renovating or maintaining a pool, contact;

**SWIMMING POOL & SPA ASSOCIATION OF NSW LIMITED**  
**PO BOX 313, BURWOOD NSW 1805. Ph: (02) 9747-6644, Fax: (02) 9744-7916**

