Quantum Heat Pumps



When choosing a hot water system, if you are looking for efficiency and convenience, it is hard to look past the Quantum heat pumps.

A heat pump makes use of heat in the air around the tank in a reverse refrigeration process to heat water in the tank, and by doing so uses less energy.

Whilst earlier generation pumps of all brands had their own maintenance issues and a less-than satisfactory life expectancy, the new generation Quantum heat pumps have addressed much of these issues and can even run with ambient temperatures as low as -10 degrees C.

They have also come down in price since introduction. They are even better value now and the cost savings over a standard hot water system kick in much quicker(when you consider the smaller difference in price between a cheaper pressure system and a heat pump).

In combination; a cheaper price, better life cycle and lower running costs mean you start saving money much faster than ever before with a Quantum Heat Pump.

So how do they really work?

Technically, a heat pump works in the following ways:

- Sun heats ambient air (without need for direct sunshine, unlike solar)
- Inducted air passes over an evaporator that preheats a refrigerant that boils at low temperature. The preheated refrigerant is then compressed and this superheats the refrigerant.
- This superheated refrigerant passes through a condenser that is wrapped around the tank, transferring its heat via heat exchange

through the tank walls. The volume of water inside the tank is thus heated from the outside in.

• Cold air is a by-product of the cycle and it is expelled from the heat pump via a fan. Refrigerant liquid moves back into the condenser to begin the whole process again until desired tank temperature is reached.

They install in nearly the same way as a normal pressurised tank, so are a viable, easy replacement for the traditional tank.

Why Quantum?

As Quantum has the largest range and are one of the leading manufacturers and innovators in Heat Pump technology we recommend and install them exclusively.

Why not just solar? : Solar hot water systems have a higher initial capital outlay, typically twice that of an equivalent heat pump.

They do harness the power of the sun, but need to be boosted at times of low sunlight and when you run out of hot water. So they do incur an electrical running cost as well.

With the new heat pump technologies, we believe at an all-in-cost comparison, they are superior to all other systems and technologies.

AMBIENT AIR	HOT WATER PRODUCTION RATE, LITRES PER HOUR									
35°C		79		79		115		115		200
30°C		71		71	-	103		103		179
25℃		62		62		91		91		158
20°C		53		53		77		77		134
15°C		44		44		63		63		110
10°C		36	Oree	36		53		53		92
5°C		29		29	1	42		42		74
0°C		24		24	2	35		35		60
·5%		21		21		30		30		53
-10°C		19		19		27		27		47
" Rotary "" Applicable to the split system		Suitable for		Suitable for		Suitable for		Suitable for		Suitable for
Note: Rated at 20°C ambient, and water heated from 20°C to 60°C.		Small Households		Small Households		Average Households		Large Households		Extra Large Households

The best way to choose the right system is to purchase through a professional technician that is experienced in the industry. Our technicians spend all day (and night) servicing, repairing and installing hot water systems so they can advise which hot water system will suit your requirements the best.

Call Speedy Hot Water on 1800 722 458 for advice and quotation information.