Pressure Washers Glossary

Pressure washers are an invaluable cleaning tool and, like many things, once you have used one you will wonder how you managed without it, but what is a pressure washer?

It basically comprises a pump, a high pressure hose and a cleaning lance with a trigger switch. Water is passed through the machine and put under pressure by the pump, and expelled via the hose and out from the nozzle at the end of the lance. On the face of it, quite a simple machine but selecting the right pressure washer is a different matter.
For instance do you want a hot or cold water machine. In most situations a cold water version is adequate, but a hot water washer with an integral boiler, will remove stubborn residue more easily (just think about doing the washing up - hot water is much more effective).

For even more cleaning power, a hot water washer can have a facility to make steam, which is achieved by a valve reducing the water flow into the boiler, causing steam to be formed when leaving the lance. Steam is useful for cleaning very stubborn deposits as well as killing bacteria.

Listed below are some explanations of the types of terminology used by manufacturers and what it means to a potential purchaser

	What does it mean	Why does it matter
Operating Pressure	The pressure the pump applies to the water as it leaves the nozzle	The cleaning power of a pressure washer is dependent on both the operating pressure and the water flow. Pressure alone is not an indication of effective cleaning as water volume plays an important part. For instance, high pressure used with a low water volume will produce a powerful, but narrow water jet which may be ideal for cleaning small areas of ingrained dirt but not so effective for cleaning larger areas with a lot of debris to be removed. In this situation a pressure washer with a larger water volume cleans more efficiently. It is a common mistake to view a washer with a high pressure rating as being a better option. A pressure washer should be selected based on what it is expected to clean and not on its pressure rating alone.
Water Flow (Can be expressed as litres or gallons per minute or per hour)	The volume of water per minute the machine delivers	
Max Temp Inlet(°C)	The maximum temperature of the water entering the machine	Whilst using cold water under pressure is adequate for most cleaning jobs, hot water does give extra cleaning power for stubborn dirt like grease and grime. Some cold water washers can be used with hot water, perhaps supplied by a separate heater, for added cleaning power. The maximum inlet temperature indicates the level of hot water the machine can take. In a hot water pressure washer the design inlet temperature should not be exceeded as it may affect the seals in the internal machinery

Motor Size	The size of the motor that drives the pump to produce the water pressure	The motor size is normally expressed in Kw for an electric washer and HP for an engine driven version. The motor must be correctly sized to match the pump to ensure optimum performance. On cheaper machines the pump may be smaller than the ideal size, meaning it has to work harder to create the required flow and pressure and as a consequence will not last as long. On industrial machines it is normal to use a slower revving motor with a larger pump which means it can be used for longer periods without overheating.
Detergent Tank Capacity (ltr/gal)	An integral detergent tank feeds cleaning solution directly on to the cleaning surface	Sometime water, even under pressure, does not provide enough cleaning power. Some machines have a facility to add detergent for extra cleaning power for stubborn residue, and a larger tank needs refilling less often.
Machine Dimensions(cm)	The physical size of the machine	Pressure washers can be larger than might be thought. Storage and portability need to be considered, as well as manoeuvrability dependent on where the washer is to be used.
Weight (Kg)	The physical weight of the machine	if it needs to be transported, the weight of the washer is a significant consideration. Bear in mind that hot water versions will be heavier.
Power	Electric, Diesel, Petrol	Pressure washers can be powered in various ways and each has its advantages. Electric power is the most common source, with smaller motors using a 240 volt single phase supply from a conventional plug socket, and larger commercial machines using a 3 phase 420 volt supply. If an independent power source is needed, which is not constrained by the electrical supply, then a diesel or petrol engine model is the answer. This type of pressure washer can be more powerful than electric machines and is ideal for off site work. These machines are often mounted in a tubular steel frame for robustness.
(Hot Water Versions) Fuel tank/Fuel Consumption	The capacity and consumption of fuel to feed the burner.	Most hot water pressure washers have a boiler which is normally heated by a burner using kerosene. The fuel tank capacity and consumption shows how long the machine can run before refilling. On diesel powered machines the fuel tank will normally power the pump and the burner. Hot water pressure washers are also available with electrically heated boilers which offer limited temperatures. These machines are normally used where using kerosene is not an option.

Deciding on which pressure to buy or hire is complex. This relationship between water flow and pressure is important depending on the type of cleaning being carried out. Reading the technical specification of a washer is fine but, is the pump of good quality? Is the hose of the correct rating for the machine and is it long enough for your needs?

To reduce uncertainty ascertain, how long the washer would be used each week, and how hard it would have to work. To have a washer working at full tilt all the time will not improve its longevity. It is also important to think about the kind of cleaning required, is the dirt caked on? Do you want to clean large floor areas or smaller pieces of equipment. Do you need a hot or cold water version?
One solution might be to hire a pressure washer before buying and ask a company expert in the field what they recommend. Don't forget to factor in to your costings any servicing that may be required to make sure the washer will work at optimum efficiency.