A Tutorial to Pumps

Article by: *John Francis*

Pumps are amazing mechanical devices and an important invention. They are used to move gas or liquid from one pressure are to another pressure area. They are used in a variety of ways from providing water to providing heat to providing energy. Pumps have been around since the 3rd century and are still going strong today.

There are two main categories of pumps: positive displacement pumps and dynamic pumps. Positive displacement pumps have little leakage as they used sealed chambers to force the fluid or gas. Dynamic pumps use momentum to move the fluid or gas and the chambers are not sealed. In these two categories there are various types of pumps.

The following list explains the different types of pumps most commonly found in residential and industrial settings. These are a good representation of the many styles and models of pumps that are manufactured. Most pumps are made for a specific use and that is represented in this list as well.

-A centrifugal pump can handle a large load. They are used most often with oil or chemical processing. They have an impeller that forces the liquid or gas into a rotary motion. This rotary motion cause pressure to build.

-Electromagnetic pumps are made to move liquid sodium and potassium. They are used in the cooling systems of nuclear reactors. These pumps use electrical conductors and magnetic pipes.

-Jet Pumps use high velocity to move fluid. They require a jet of steam or water to carry the fluid through it. The jet pressure makes a vacuum that sucks more fluid. They are so powerful that they are most often used to move water from deep wells.

-A screw pump is also called a positive displacement pump. It is a widely used pump because it does not form clumps when pumping solids and keeps a constant speed.

These four pump types only represent a portion of the pumps on the market. They are, however, the most popular models.

Pumps are found in many environments. They range from industrial plants to a home water system. The way a pump works depends largely on the category of pump it is and the type of pump it is. The use is then based on these factors. All pumps work under the same principles, though. Pumps use pressure to move liquid or gas to a different location.http://pumpshub.com Everything you need to know about Pumps.