

## Steering Valves

Valves assist to regulate the flow of fluids like slurries, fluidized gases or regular gases, liquids by closing, partially obstructing or even by opening some passageways. Standard valves are pipe fittings but are discussed as a separate category. In cases where an open valve is concerned, fluid flows in a direction from higher to lower pressure.

Many applications like for example industrial, residential, transport, commercial and military industries use valves. Some of the major businesses which rely on valves consist of the power generation, water reticulation, sewerage, oil and gas sector, mining and chemical manufacturing.

In daily activities, the most common valves are plumbing valves as seen because it taps for tap water. Several common examples comprise small valves fitted to dishwashers and washing machines, gas control valves on cookers, valves in car engines and safety devices fitted to hot water systems. In nature, veins in the human body act as valves and regulate the blood circulation. Heart valves even control the flow of blood in the chambers of the heart and maintain the right pumping action.

Valves can be utilized and worked in several ways that they could be operated by a lever, a handle or a pedal. In addition, valves can be driven automatically or by changes in temperature, pressure or flow. These changes can act upon a piston or a diaphragm which in turn activates the valve. Several popular examples of this kind of valve are found on boilers or safety valves fitted to hot water systems.

Valves are used in various complex control systems which can require an automatic control that is based on external input. Regulating the flow through the pipe to a changing set point is an example. These circumstances usually require an actuator. An actuator will stroke the valve depending on its input and set-up, that allows the valve to be placed accurately while enabling control over various requirements.