

## Steering Valves

Valves assist to control the flow of a fluids like for instance liquids, slurries, fluidized gases or regular gases by partially obstructing, opening or even by closing 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.

Valves are used in various applications such as industrial, residential, transport, commercial and military trades. A few of the major trades which rely on valves include the mining, chemical manufacturing, power generation, water reticulation, sewerage and oil and gas sector.

In every day activities, the most popular valves are plumbing valves as seen in view of the fact that it taps for tap water. Various popular examples comprise small valves fitted to washing machines and dishwashers, 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 control the blood flow. Heart valves also regulate the circulation of blood in the chambers of the heart and maintain the correct pumping action.

Valves can be worked in various ways. For instance, they could be worked either by a handle, a pedal or a lever. Valves could be driven by changes in flow, temperature or pressure or they could be automatic. These changes may act upon a piston or a diaphragm which in turn activates the valve. Various popular examples of this type of valve are seen on safety valves or boilers fitted to hot water systems.

Valves are utilized in various complex control systems that can require an automatic control that is based on external input. Controlling the flow through the pipe to a changing set point is one example. These circumstances normally need an actuator. An actuator will stroke the valve depending on its input and set-up, that allows the valve to be positioned precisely while enabling control over several requirements.