

## Steering Valves

A valve is a device which controls the flow of a fluid like fluidized gases or regular gases, liquids, slurries, by opening, closing or partially obstructing certain passageways. Valves are generally pipe fittings but are typically discussed as a separate category. In cases where an open valve is concerned, fluid flows in a direction from higher to lower pressure.

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

In day to day activities, the most popular valves are plumbing valves as seen as it taps for tap water. Several common examples consist of small valves fitted to dishwashers and washing machines, gas control valves on cookers, valves inside 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 likewise regulate the flow of blood in the chambers of the heart and maintain the correct pumping action.

Valves could be worked in several ways. For instance, they could be worked either by a pedal, a lever or a handle. Valves can be driven by changes in temperature, pressure or flow or they can be automatic. These changes can act upon a diaphragm or a piston 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.

There are more complex control systems making use of valves which require automatic control that is based on external input. Like for example, regulating flow through a pipe to a changing set point. These circumstances normally require an actuator. An actuator will stroke the valve depending on its input and set-up, allowing the valve to be situated accurately while allowing control over several requirements.