Steering Valves

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

Many applications like for instance industrial, residential, transport, commercial and military businesses utilize valves. Some of the major trades that rely on valves include the power generation, water reticulation, sewerage, oil and gas sector, mining and chemical manufacturing.

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

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

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