## Control Valves for Forklift

Forklift Control Valve - Automatic control systems were initially developed more than two thousand years ago. The ancient water clock of Ktesibios in Alexandria Egypt dating to the third century B.C. is thought to be the very first feedback control tool on record. This particular clock kept time by way of regulating the water level inside a vessel and the water flow from the vessel. A common style, this successful machine was being made in a similar way in Baghdad when the Mongols captured the city in 1258 A.D.

Throughout history, different automatic equipments have been utilized to be able to simply entertain or to accomplish specific tasks. A popular European design in the 17th and 18th centuries was the automata. This machine was an example of "open-loop" control, consisting dancing figures which would repeat the same job repeatedly.

Closed loop or otherwise called feedback controlled equipments consist of the temperature regulator common on furnaces. This was developed during 1620 and accredited to Drebbel. One more example is the centrifugal fly ball governor developed during 1788 by James Watt and used for regulating the speed of steam engines.

The Maxwell electromagnetic field equations, discovered by J.C. Maxwell wrote a paper in the year 1868 "On Governors," which was able to explaining the exhibited by the fly ball governor. To be able to explain the control system, he made use of differential equations. This paper demonstrated the usefulness and importance of mathematical methods and models in relation to comprehending complicated phenomena. It likewise signaled the start of mathematical control and systems theory. Previous elements of control theory had appeared before by not as convincingly and as dramatically as in Maxwell's study.

In the following 100 years control theory made huge strides. New developments in mathematical techniques made it feasible to more precisely control considerably more dynamic systems compared to the first fly ball governor. These updated methods consist of various developments in optimal control in the 1950s and 1960s, followed by advancement in robust, stochastic, adaptive and optimal control techniques in the 1970s and the 1980s.

New technology and applications of control methodology have helped produce cleaner auto engines, cleaner and more efficient chemical processes and have helped make space travel and communication satellites possible.

Initially, control engineering was performed as just a part of mechanical engineering. Control theories were originally studied with electrical engineering for the reason that electrical circuits could simply be explained with control theory methods. Currently, control engineering has emerged as a unique discipline.

The very first control relationships had a current output that was represented with a voltage control input. As the proper technology to implement electrical control systems was unavailable at that moment, designers left with the choice of slow responding mechanical systems and less efficient systems. The governor is a very efficient mechanical controller which is still usually used by various hydro plants. In the long run, process control systems became offered previous to modern power electronics. These process controls systems were normally used in industrial applications and were devised by mechanical engineers using pneumatic and hydraulic control equipments, many of which are still being used these days.