Air Valves

Combination Air Valve

The presence of free air in pipeline can reduce the severity of water hammer considerably. Celerity(speed) of an elastic wave with, say 2% of air at a pressure head of 50m of water reduces celerity from about 1100m/s to 160 m/s for a typical pipe line. On the other hand air in a rising main, wheather in solution or in bubble from can have number of ill effects.

A pipeline designer therefore has to factor in all the aforesaid, the critical level of permissible vaccum inside a pipeline to prevent collapse vis-a-vis the suction and discharge capacity of an air valve (curves on request) before deciding upon the type, size, spacing and location of these air valves.

- Single Orifice Air Valve - Air relief during normal running
- Single Orifice Air Valve - Air release /Suction during filling or draining
- Dual Orifice Air Valve - Combination air valve
- IS 14845 and AWWA C512
- Anti Vaccum Valve

Double Air Valves

The presence of free air in pipeline can reduce the severity of water hammer considerably. Celerity(speed) of an elastic wave with, say 2% of air at a pressure head of 50m of water reduces celerity from about 1100m/s to 160 m/s for a typical pipe line. On the other hand air in a rising main, wheather in solution or in bubble from can have number of ill effects.

A pipeline designer therefore has to factor in all the aforesaid, the critical level of permissible vaccum inside a pipeline to prevent collapse vis-a-vis the suction and discharge

capacity of an air valve (curves on request) before deciding upon the type, size, spacing and location of these air valves.

- Single Orifice Air Valve - Air relief during normal running
- Single Orifice Air Valve - Air release /Suction during filling or draining
- Dual Orifice Air Valve - Combination air valve
- IS 14845 and AWWA C512
- Anti Vaccum Valve