PROBLEM SOLVER

REDUCING PRESSURE SPIKES IN FLUID SYSTEMS



Problem: What is 'water hammer' and why does it matter?

Water hammer, also called fluid hammer or hydraulic shock, is a wave or surge when a fluid in motion is forced to stop suddenly. In process applications, this happens when a fast-acting valve closes a pipe while the water upstream is still moving.

Pressure spikes have been measured as high as 15 times higher than the normal water pressure in the pipeline. This exceeds typical UL rating safety factors and can damage equipment not designed to withstand pressures that high.

Solution:

The simplest approach is to attack this problem at its source – the valve. After all, it is the rapid closing of the valve that sends the fluid surging back upstream. IMI Buschjost 82410 and 82740 series valves have a propriety internal design that lets them close smoothly and gently, reducing pressure spikes while still maintaining closing speed. These valves have been proven to reduce pressure spikes by more than 80% compared to leading competitors' valves.



