

UPGRADE YOUR SYSTEM A Better Pulsation Dampener

Positive Displacement (PD) pumps create pulsation and hydraulic shock in normal operating conditions. These silent pressure spikes will weaken and damage your system over time, leading to unexpected and catastrophic failures in key safety applications.

Update Now and Save Maintenance Costs and Worry

NuSource utilizes patented, proprietary technology from NUCCORP to provide the nuclear industry with unique a bladderless pulsation dampener (BPD).

Is Your System at Risk?

Dampeners that rely on bladder technology expose your system to the effects of constant pressure fluctuations and corrosion: Ruptures, Leaks, and possible Gas Migration.

- Bladder failures are not easily detected
- A bladder-type system is only effective over a small pressure range (i.e., if the dampener is charged to work at RCS pressure of 2200 psi, it will not function at lower pressures)
- The Original Equipment Manufacturer (OEM) of the bladder-type pulsation dampener, Greer Hydraulics, no longer maintains an Appendix B Quality Program, or an ASME (N) Stamp

The bladderless pulsation dampener design involves a large spherical ASME Section III, Class 2 pressure vessel with internal features that allow flow characteristics inside the vessel to damp out pump pressure pulses.

This design has been used successfully in nuclear power plants in the US and Switzerland, specifically downstream of APV Gaulin triplex positive displacement pumps similar to those at Oconee.



Avoid the High Costs of Maintenance and Emergency Servicing

Protect your pipes, valves, supports, fittings, meters, and in-line instrumentation from destructive pulsations and surges over the complete range of operating pressures.

Design Features:

- **Stainless Steel**
- **No Moving Parts**
- **No Bladder**
- **Fully Adjustable**
- **Zero Maintenance**

Acoustically Adjustable

This is the only bladderless pulsation dampener on the market that can be continuously fine-tuned to perfection after installation.



Work with NuSource:

- ASME Code Section III Design Analyses
- ASME Code Design Report
- Customized Design to Suit Existing Infrastructure
- Prototyping and Testing
- On-Site Installation Support
- Follow Up Support and Adjustments



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