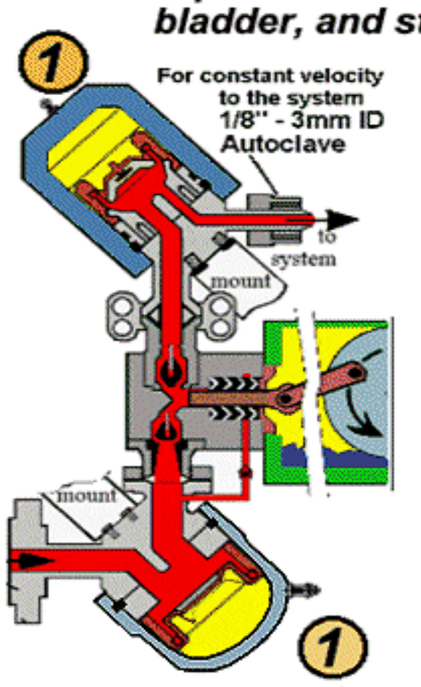
INSTALLATION FOR PULSE DAMPERS TO PACKED PLUNGER PUMP PIPE SYSTEMS

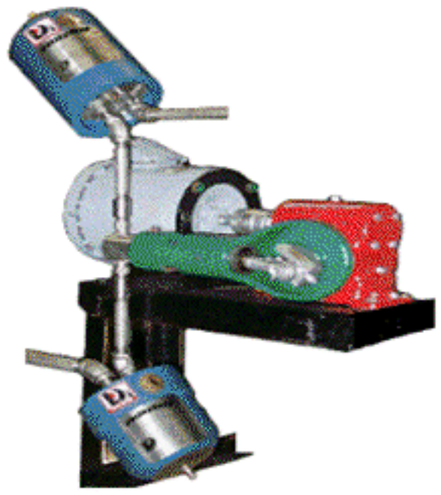
i - 5
PG-132

Performance requires: Close coupling to pump. No oversized pipes, Straight shot or 5D bends.
Weld the pipe base in line, or If you flange your "Ts", flange the damper pipe base.

PIPEHUGGER 1

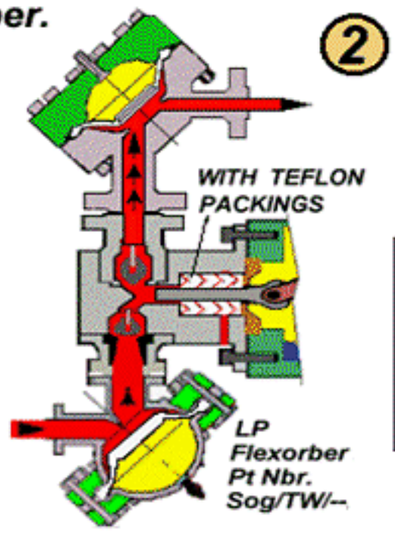
With liquid in the elastomer bladder, and stainless wetted parts.





FLEXORBER 2

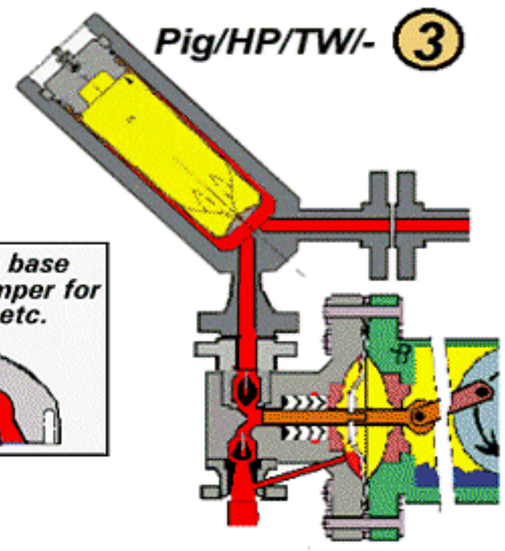
LDi Flexflon or DuPont Teflon diaphragms, & stainless liquid chamber.



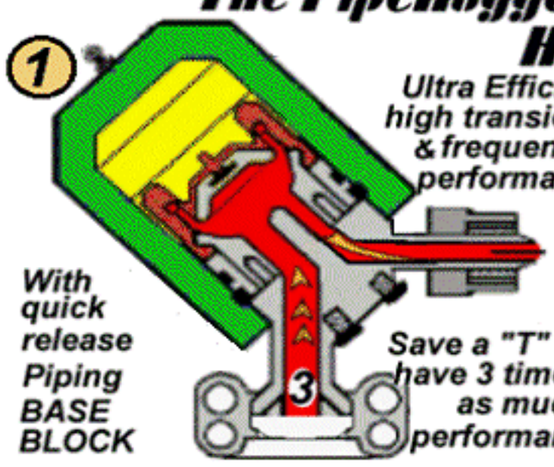
Block fits pipe base in place of damper for for Hydro-test etc.

PIPEGUARD 3

Gas in the bag, and an all stainless pressure vessel.



The PipeHugger HP



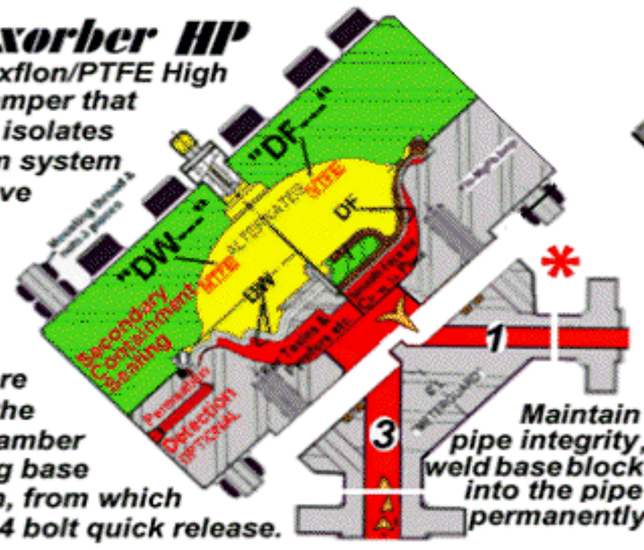
Ultra Efficient high transient & frequency performance

With quick release Piping BASE BLOCK

Save a "T" & have 3 times as much performance.

The Flexorber HP

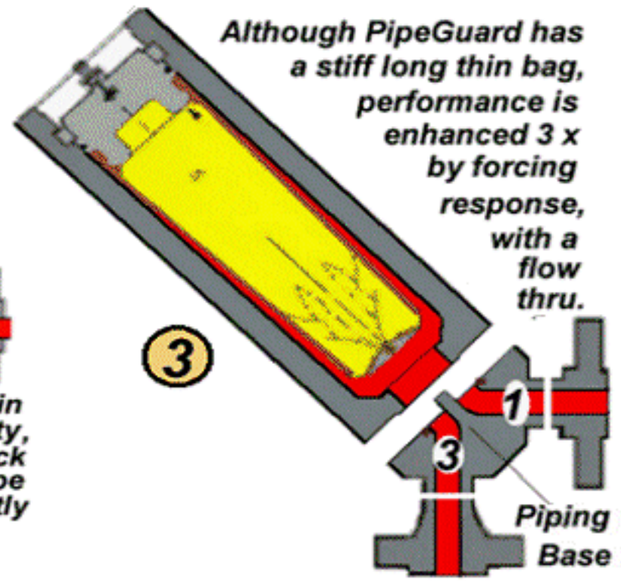
The only Flexflon/PTFE High Pressure Damper that Intercepts & isolates a pump from system pressure wave response.



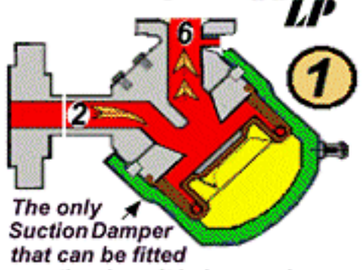
Transients are forced into the damping chamber by the piping base block design, from which damper is a 4 bolt quick release.

Maintain pipe integrity, weld base block into the pipe permanently

Although PipeGuard has a stiff long thin bag, performance is enhanced 3 x by forcing response, with a flow thru.



The PipeHugger LP



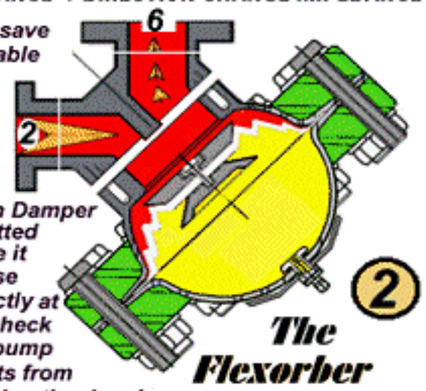
The only Suction Damper that can be fitted exactly where it belongs, close coupled directly at the suction check valve of the pump it protects.

Block fits pipe base in place of damper for for Hydro-test etc.

CAPACITANCE + DIRECTION CHANGE IMPEDANCE

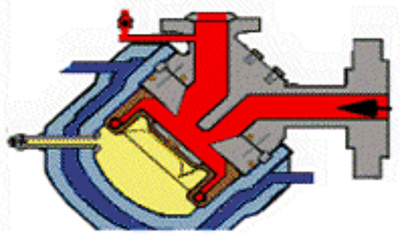
Piping Base save a "T" and enable quick 4 bolt Damper removal, plus facilitate --

-- The only PTFE Suction Damper that can be fitted exactly where it belongs, close coupled directly at the suction check valve of the pump that it protects from suction acceleration head loss starvation and cavitation.



The Flexorber LP

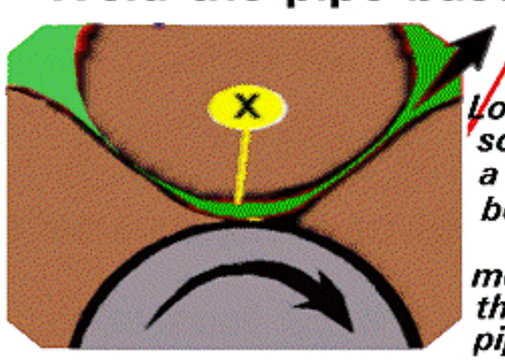
Cooling the suction liquid prevents vapor lock improving volumetric efficiency - which stops discharge pulsation.



Typically, Jacketed damper

INSTALLING PULSE DAMPERS WITH LOBE PUMPS FOR HIGH VISCOSITY LIQUID PIPE SYSTEMS

Performance requires: Close coupling to pump. No oversized pipes, Straight shot or 5D bends.
Weld the pipe base in line, or If you flange your "Ts", flange the damper pipe base.

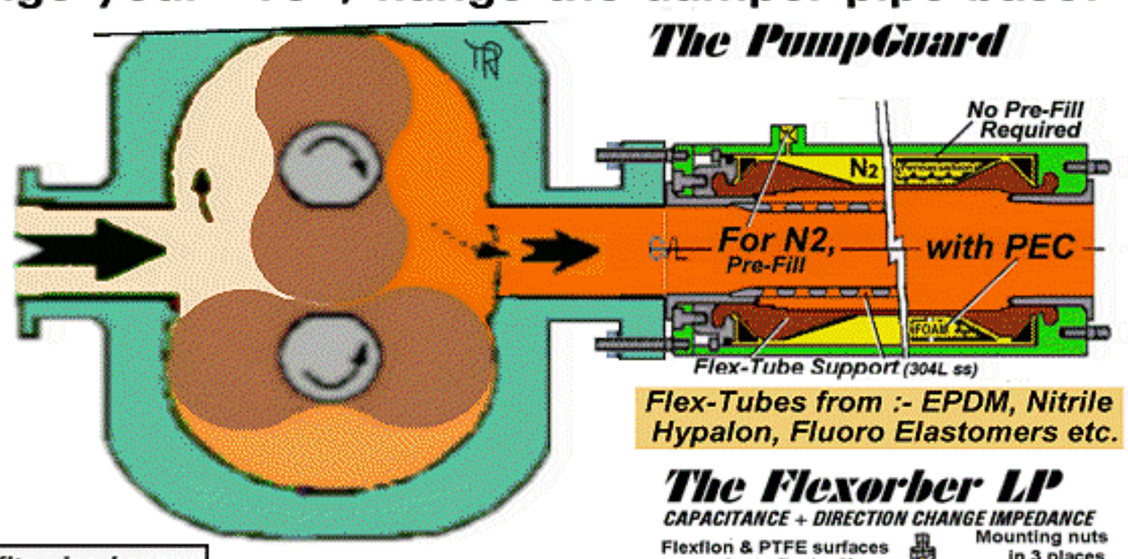


The source of the Disturbance : X

Lobes nest into each other so finely that each makes a squirt from the valley between the lobes.

The squirt may be measured as a soft "shock" that is magnified by the pipe system.

The PumpGuard



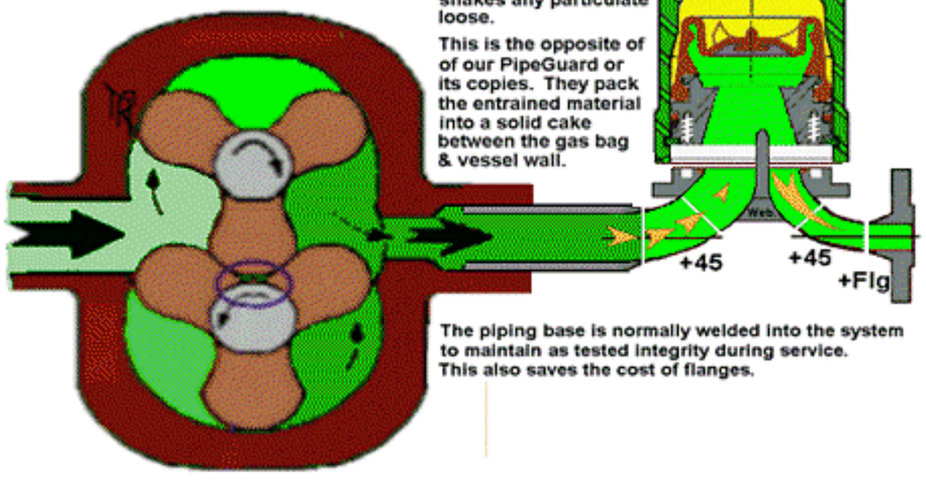
Flex-Tubes from :- EPDM, Nitrile Hypalon, Fluoro Elastomers etc.

Liquid in a bladder of EP, Buna N. Fluoro. or Hypalon Elastomer.

The PipeHugger LP

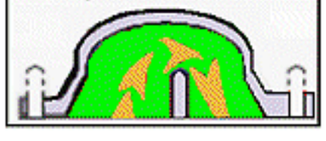
With the liquid inside the bladder every time it pulses, it shakes any particulate loose.

This is the opposite of of our PipeGuard or its copies. They pack the entrained material into a solid cake between the gas bag & vessel wall.



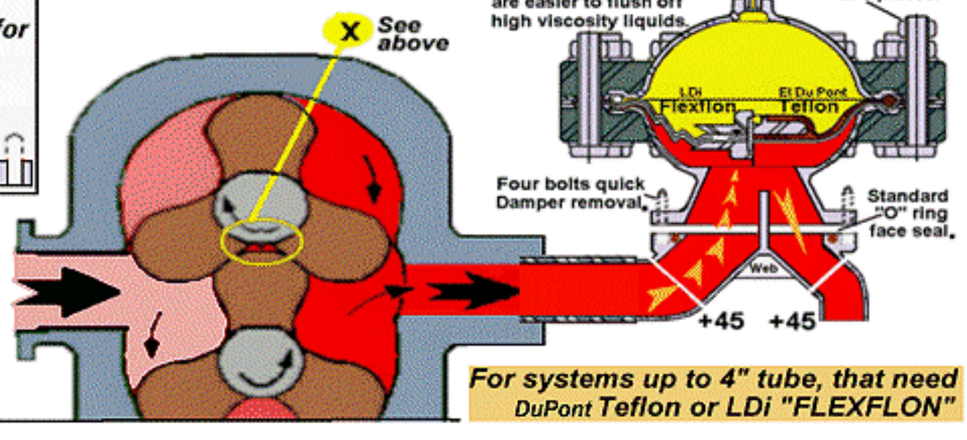
The piping base is normally welded into the system to maintain as tested integrity during service. This also saves the cost of flanges.

Block fits pipe base in place of damper for for Hydro-test etc.



The Flexorber LP

CAPACITANCE + DIRECTION CHANGE IMPEDANCE



For systems up to 4" tube, that need DuPont Teflon or LDi "FLEXFLON"