SAFETY AND PIPING

SAFETY CONSIDERATION WITH PIPING BASE BLOCKS

Prevent Multiple Over Pressurizations.
1. Pressure testing your pipe system generally implies a sustained pressure of 1.3 to 1.5 times your design pressure.

With the introduction of higher allowable working stress figures in the USA, in line with those used in Europe, it is NOT normally allowable to subject pressure vessels to repeated pressure above design pressure.

To enable you to test the complete system pressure integrity, but still not over-pressure your damper, **PulseGuard** standard dampers fit piping base blocks which become part of the pipe system, and save you "T" pieces, 3 fittings and 3 NDE jobs. **PulseGuard** has flow through plates that bolt in place of the damper - which is supplied with its own "Hydro-Test" certification.

Prevent pipe loadings from stressing the vessel.
2. Whilst saving installation cost and ensuring pipe integrity testing, piping base blocks, add safety by ensuring that nozzle loadings are not applied to the vessel shell. Differential expansion and contraction of the pipe, shaking in the XY&Z planes does not apply fatigue stress to the damper vessel.

Service down time, and or fast change-out is facilitated by simply unbolting the damper capsule from the "O" ring face seals of its base.

Ensure Decontamination Before Servicing.
3. Being normally multiported flow through, piping bases provide the safety of being in-place flushable before service, protecting the service technician.

Ensure Accurate Pressure measurement by your instruments.
4. If the flow through facility, which also enables the damper to intercept pressure wave activity that causes fatigue, is not required in your application, you may still pipe a "T" to one connection and save money by using the other for protecting your system Instrument tap from transients, or your relief valve from bouncing.

CHECK FLOW RATE FOR PIPE SIZE, AND PULSE FREQUENCY

Smaller pipe dissipate pulsation, a flow velocity not below 2ft/sec 0.6m/sec for suction and not less than 7ft/sec 2 meters/sec, on discharge is best. For pulse frequencies above 7 cycles/sec & Hz. flow through interception, as shown below is essential.

For other Piping Bases please see PulseGuard catalog page 36 or for full understanding, the LDi catalog pages 33, 34 & 35.