# Dilution<sup>™</sup> SOLUTIONS

## WATER HAMMER ARRESTOR INSTALLATION RECOMMENDATIONS

#### What is Water Hammer?

Water Hammer is defined as a pressure surge, or wave, caused when a fluid in motion is forced to stop or change directions suddenly, due to a shock

#### What could be the Shock Source?

A Shock Source may be a:

- Solenoid Valve
- Quarter Turn Valve
- Trigger Gun

Water Hammer commonly occurs when a valve closes suddenly at the solenoid manifold, and as a pressure wave propagates in the pipe, it is forced back at the source at an exponential rate (sometimes 4x the force / pressure)

This pressure wave can cause problems from noise and vibration, to pipe collapse or bursting. In cases of Water Hammer occurrences, a Water Hammer Arrestor (WHA) must be installed to protect the Dosatron units, and components, from the phenomenon



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### Water Hammer Arrestor (WHA) Installation Tips

A Water Hammer Arrestor should always be installed so the shock **dead-ends** into the arrestor. Arrestors should always be placed as near to the source of shock as possible



- 1. Flush line prior to installation
- 2. Use thread tape to seal pipe threads
- 3. To tighten, place wrench on hex only
- 4. For best results, match Arrestor to pipe size at the point of installation. Call 1-800-451-6628 to learn about our WHA Kits option
- 5. Vertical-upward, or horizontal installations are acceptable. Vertical-downward position is not recommended
- 6. Verify manufacturer's recommended pressure rating

#### Proper Installation of Water Hammer Arrestors (WHA)

This image illustrates the proper positioning for the Arrestor, where the shock would be absorbed with 100% effectiveness



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