

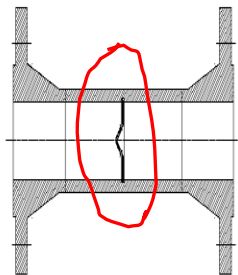
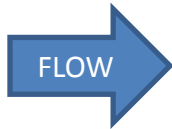
CONICAL SHAPED RESTRICTION ORIFICE PLATES

Replace Multi-Stage Orifice with Single Conical Orifice, 1 piece

**With engineered hole size and placement:*

- **Solve** problems associated with orifice **cavitation** (erosion, vibration, noise)
- **Reduce failure** potential by **minimizing** number of **welds** and **parts**.
- **Save space**, one plate replaces multiple

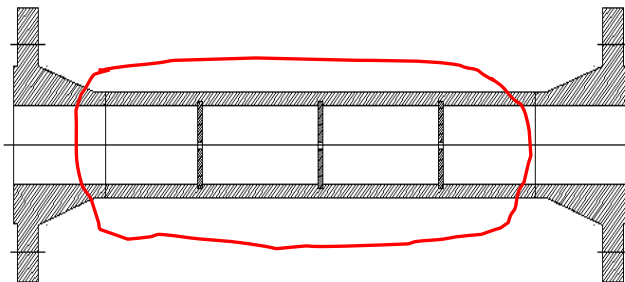
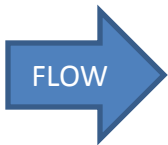
USE THIS ...



CONICAL ORIFICE
ASSEMBLY



INSTEAD OF THIS ...



MULTI-STAGE
ASSEMBLY

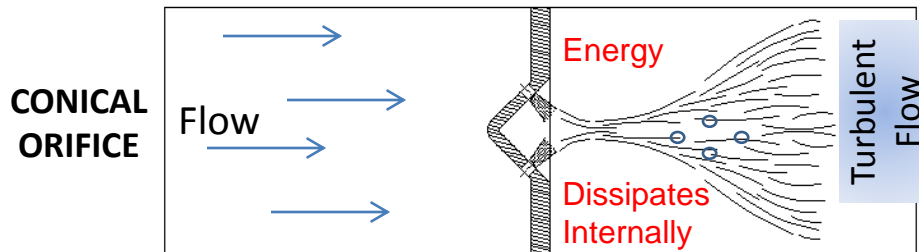


Testimonial
...Conical orifice plate is meeting our needs and allowing us to work over and above the pump curve, allows forgiveness for running pump above and beyond its published limits...
Paper Plant Process Engineer

Conical Shaped Orifice Plate

Eliminates damage caused by cavitation

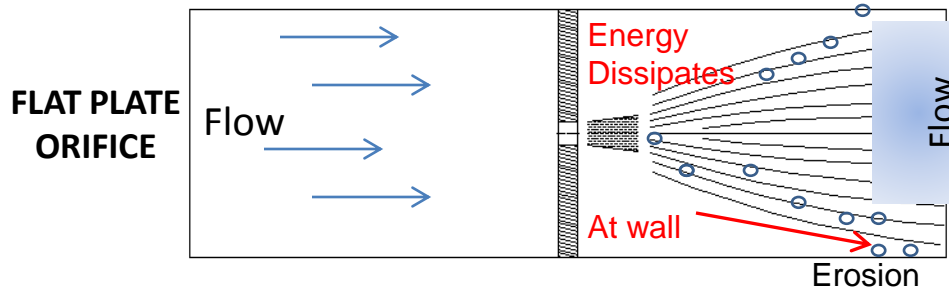
- Energy dissipated **inside the cone** of the orifice, not at pipe wall
- Conical orifice allows energy to dissipate before striking pipe wall



Flow re-develops from the inside out, eliminating the effect of cavitation erosion and vibration.



- Flat plate orifice creates damaging bubbles (cavitation) at pipe wall



Flow re-develops from the outside in. Cavitation at walls causes erosion and vibration.

Testimonial: “We had trouble with high pressure shower pumps on a machine. When operations would open the flushing line for the shower header, the pump would “run-out” far to the right of the curve, which would damage the high pressure pumps. We wanted to add an orifice plate to the flushing line to limit the flow. We did not have room for a traditional multistage orifice. We added the NucFlow orifice plates since they were compact. They also had a very short delivery period. They worked well and solved the problem with the pumps.” *Project Engineer for Stantec*