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*The NotchFlo DST valve is available as globe and block forged valves with 4-stage NotchFlo DST anti-cavitation severe service trim. It offers control of high pressure drop liquids (up to 4200 psi) while avoiding the damaging effects of cavitation.*

### Features:

- **Longer Trim Life** - The NotchFlo™ valve features a protected seat design whereby the shutoff function is separate from the throttling areas of the trim.
- **Class V Shutoff** - Use of standard metal seats provides tight shutoff to minimize seat erosion.
- **High Pressure Drops** - Balanced trim is standard. Used with either diaphragm or piston actuators, NotchFlo DST valves are effective in applications covering a wide range of allowable pressure drops.
- **Sour Service Capability** - Materials are available for applications handling sour fluids. These materials comply with the recommendations of NACE MR0175.

- **Availability** - The NotchFlo DST valve is available for both globe and angle valve body designs.
- **Characterization** - Special characterized cages are available to provide customer specified rangeability for specific system requirements.

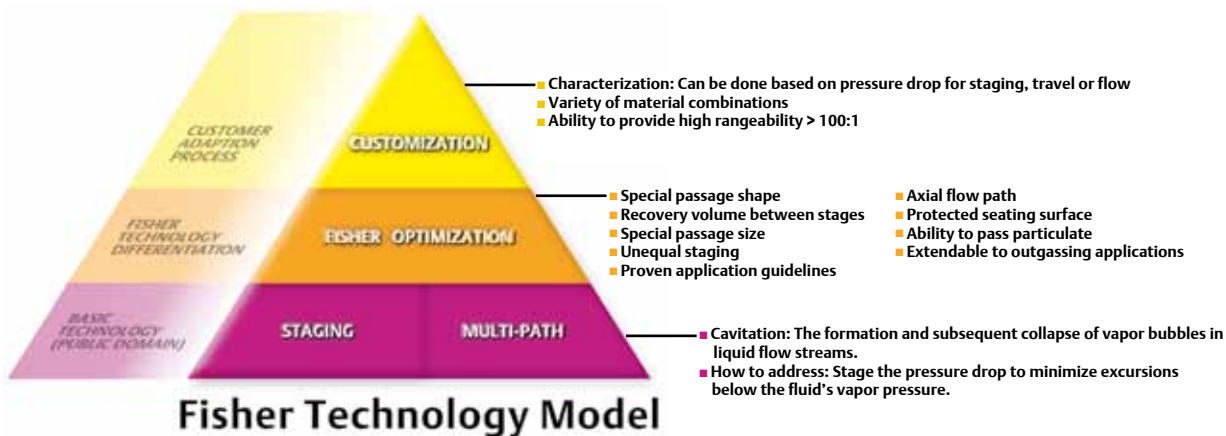
### Operational Overview:

The NotchFlo DST valve utilizes a high resistance, multi-stage, axial flow path where fluid flow is parallel to the axis of the plug and cage. Pressure reduction occurs along the length of the plug; thus individual stages aren't exposed to the full pressure differential. Therefore, trim life is enhanced. The NotchFlo DST valve utilizes a series of notched flow restrictions and expansions to control the pressure drop of the fluid. The amount of pressure drop per stage is controlled to prevent cavitation problems and minimize erosion issues in a properly sized valve. Flow passage configuration provided by the multi-stage plug and cage design make the NotchFlo DST valve well-suited for applications involving fluids with entrained particles. This is a potentially serious problem for other anti-cavitation valve designs which are subject to clogged flow passages. Design of the trim allows for high rangeability.

### Typical Applications:

**Hydrocarbon:** Produced Water Injection, Hot High Pressure Separator Letdown, Cold High Pressure Separator Letdown

**Power:** Boiler Feedpump Recirculation, Condensate Pump Recirculation



### Optimization Details:

- **Special passage shape** - Eliminates flow separation, which is key in reduction of trim area, reduction in fluid pressure and elimination of localized cavitation.
- **Recovery volume between stages** - Key for pressure and flow stabilization between stages.
- **Special passage size** - Provides benefits of frequency shifting for lower sound pressure levels.
- **Unequal staging** - Ensures majority of drop is taken in the initial stages to ensure lowest pressure drop across last stage.

- **Proven application guidelines** - Fisher's proven experience extends to common process fluids.
- **Axial flow path** - Provides further recovery volume to gain additional staging benefits.
- **Protected seating surface** - Ensures pressure drop is not taken across seating surface.
- **Ability to pass particulate** - Can be used in dirty services while still eliminating cavitation.
- **Extendable to outgassing applications** - Can be used in services where cavitation and outgassing can occur.

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