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*Whisper Trim® III cages offer advanced attenuation of aerodynamic noise in vapor, gas, or steam applications involving high pressure drops or high pressure drop ratios.*

### Features:

- **Optimum Performance** - Offers excellent noise reduction and high flow capacity
- **Noise Control** - A well established and proven technology that has been used in numerous applications to provide up to 30 dBA of noise attenuation compared to the same valve with standard trim.
- **Easy Maintenance** - Quick-change trim allows fast and easy inspection or replacement without taking the valve body out of the pipeline.
- **Longer Trim Life** - Standard hardened material provides exceptional wear resistance.
- **Sour Gas Service** - Optional materials are available that comply with NACE Standard MRO175.

- **Characterization** - Special characterized cages are available to provide customer specified rangeability for specific system requirements.

### Operational Overview:

The Whisper Trim III lowers valve noise by utilizing multiple orifices of special shape, size and spacing. These orifices break up turbulent fluid streams, reducing noise-producing interactions. The trim shifts acoustic energy to higher frequencies that are not readily absorbed by downstream piping. At high frequencies, the pipe radiates much less sound in the audible range, reducing external sound pressure levels. This also helps to reduce strain energy and combat pipe fatigue.

By properly spacing the holes, the exit jets from the trim are essentially parallel. This avoids shock cell interaction of the outlet jets that could cause turbulence and noise. The hole pattern of the Whisper III trim is also spaced so that there is not a 'step' response in the flow, which is experienced with tortuous path designs. Custom characterization is available to match virtually any flow requirement.

Tight shutoff is recommended to protect against high velocity erosion commonly experienced with seat leakage.

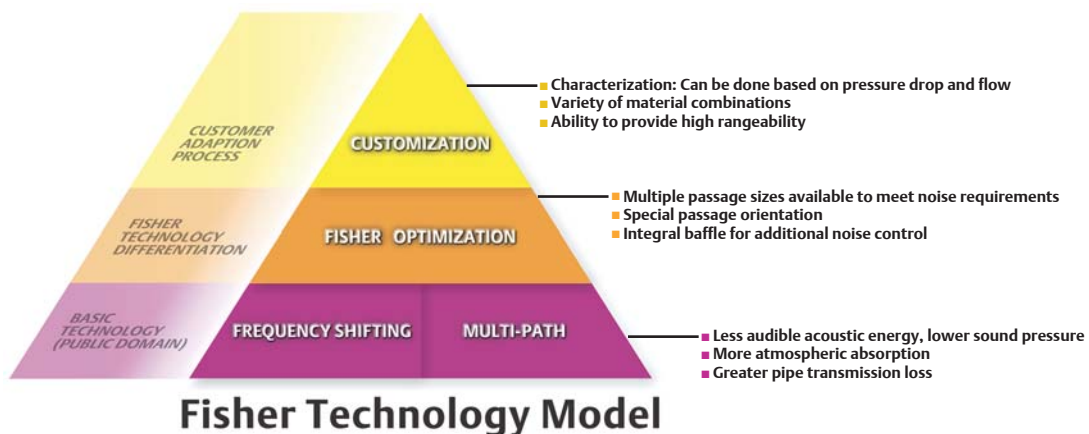
### Typical Applications:

**Hydrocarbon:** Compressor Anti-Surge, Overhead Stripper Gas, Vent to Flare, Gas Pipeline Transmission

**Power:** HP Steam Vent, Turbine Bypass, Sootblower

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### Optimization Details:

- **Special passage size** - Our passage sizes have been designed to attain the utmost benefits of frequency shifting
- **Special passage orientation** - Ensures jet independence and effective frequency shifting
- **Integral baffle** - Breaks up jets in high pressure drop applications to provide additional noise attenuation

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