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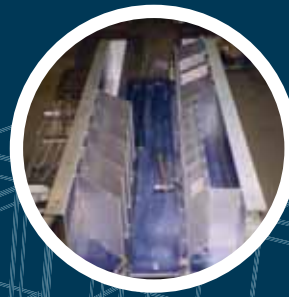
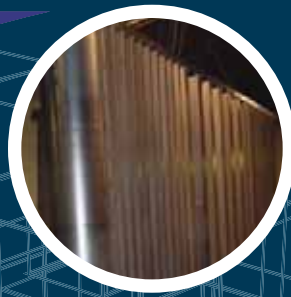
## Tuned-Dissipative Silencer

**N**oise containing a tonal component is invariably perceived as being more objectionable than noise having the same overall level without a tone. Fan noise is characterized by tones at the blade passage frequency and its harmonics. Tuned-dissipative silencers are mechanical noise filters, rather than inert absorptive masses. They provide good broadband attenuation while selectively suppressing tones.

Tuned-dissipative silencers consist of baffles containing cavities selectively tuned by virtue of their size to specific frequencies. The most common designs contain two sizes of cavities which are tuned to the fundamental frequency and its first harmonic. Triple tuning can be utilized in unique applications. Each cavity contains absorptive material along one of its sides. The presence of this material and the inclined shape of the cavities widen the band reject width about the tuning point to accommodate normal variations in operating temperature. Both of these features contribute to the broadband performance of tuned-dissipative silencers.



# Tuned-Dissipative Silencer



Under normal conditions, tuned-dissipative silencers do not require maintenance. Through the proper selection of materials, the design life of the silencer can be consistent with related equipment. For particularly dirty applications involving scheduled system cleaning, Sound Technologies can incorporate features to allow easy cleaning of the silencer and ready replacement of the absorptive elements. Materials and features for each silencer are selected based on service conditions, desired design life, and installation requirements.

Finishes are selected for durability and to match or compliment your facility. In addition, other products required are available, custom designed, to complete the installation of your silencer including rainhoods, birdscreens, transition sections, support hardware, ancillary ductwork, flanges, and expansion joints.

**TUNED-DISSIPATIVE  
SILENCERS ARE  
APPROPRIATE  
FOR MANY APPLICATIONS.**

**They successfully operate on:**

- **Coal fired power plant fans**
- **Sewage treatment incinerator ID fans**
- **Fresh air fan intakes**
- **Solid waste incinerator ID fans**



**Sound  
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Keeping industry **quiet**