INDUSTRIAL NOISE CONTROL
VAW Systems’ industrial noise control products are designed for virtually any standard ventilation fan or heavy duty, high pressure fan system. The silencers are aerodynamically optimized to deliver high levels of attenuation (insertion loss) with minimal pressure drop and adverse fan system interactions. Products include large radius inlets and tapered outlets, delivering an excellent balance between acoustic and aerodynamic performance. There are number of construction options and accessories available that may be selected for any fan application, including dirty or corrosive airstreams. The silencer connection is matched to the fan connection (no additional transitional ducts required). Overall geometry may be varied to meet installation space limitations.

**Vent Silencers for High Pressure Relief**

Common to most high pressure gas applications is the need to vent or evacuate a system in the event of a system upset or shut down.

VAW Systems’ vent and blow-off silencers are specially designed to significantly reduce the noise generated by the high differential pressure at the time of a release of steam, air, natural gas, or other gases.

The product is selected for your application criteria, including the upstream pressure and temperature, the flow rate required to be vented and a range of paint finishes.

**Silencers for Dirty Airstreams**

Large ventilation stacks may include fans with prominent tones and airstreams with high particular levels or fluids.

VAW Systems offers a range of stack noise control solutions, either as stand-alone silencers or baffle inserts.

The solution may include the design and supply of the entire stack system, where the silencer may form part of the structural support system.

Our baffle designs may be customized to address a fan’s fundamental frequency and harmonic(s), as required.
Stack Noise Control

Stack systems may require significant attenuation on both the inlet and exhaust side of the fan.

VAW Systems provides a wide range of products that are adapted to stack systems, including low pressure drop circular silencers and high performance rectangular splitters.

The solution may be easily adapted for high velocities, elevated temperatures, high particulate levels, tuned to specific frequency(s); or, all of the above.

Back-up Generator Enclosure

Power Generators introduce very high sound emissions, often operating in close proximity to sensitive receptors, both on-site and at a property line.

Choose VAW Systems complete integrated components, installed within a building or as a stand-alone acoustic enclosure.

Our solutions include compact ventilation silencers, such as transitional casings and elbow silencers that save space while delivering minimal static pressure losses.

Fan Silencers

For a complete, cost effective fan noise control package, choose VAW Systems’ silencers, filter boxes, weather hoods, flexible connectors and other accessories.

We provide special material finishes and paint systems that help address any in-field condition.

VAW Systems offers tuned silencers, cleanable designs, acoustic enclosures and support bases – all designed for your equipment and installation conditions.

Tunnel Jet Fan Silencers

Axial fans are often employed in tunnel ventilation systems, such as rail and road corridors.

Circular silencers include center body pods that are matched to the fan and motor hub, delivering uniform flow in and out of the fan.

Extended casing designs provide enhanced low frequency performance.

VAW Systems’ jet fan silencers are designed with a suitable shape and size, ensuring that the pressure drop is minimized (often near zero pressure losses), while helping the fan achieve the required thrust performance and noise criteria.
**Construction Options**
- Heavy Casings: up to 3/8 in. steel plate.
- Casing Materials: galvanized steel, stainless (304 & 316), satin coat, aluminum, HRS with paint system.
- Various flange configurations and materials.
- Custom configurations for space and weight restrictions.
- Support brackets and legs.
- API 560 and API 673 Construction Standards.
- Industrial Paint Systems and Coatings:
  - Rust inhibitive prime painted exterior finish;
  - High temperature paints;
- Anti-corrosive coatings.
- Protective films for media fill.
- Special shipping splits.
- Removable baffles, centerbody and side panels.
- Wire mesh / bird screen protection.

**Silencer Accessories**
- Horizontal and Vertical Rain Hoods.
- Horizontal and Vertical Filter Systems (indoor & outdoor applications).
- Transitions and Evases (integral or stand alone).
- Airflow Probes.
- Access Doors and Sampling Ports.
- Drainage connections and plugs.

---

**Silencer Selection Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Light to Medium Duty General Purpose Fans</th>
<th>Medium to Heavy Duty Industrial Fans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan Static</td>
<td>Up to 16 in.w.g.</td>
<td>Up to 150 in.w.g.</td>
</tr>
<tr>
<td>Airstream Temperature</td>
<td>-20 to 150 deg.F</td>
<td>-40 to 350 deg.F</td>
</tr>
<tr>
<td>Casing Materials* (default selection)</td>
<td>18 Ga. Galvanized Steel</td>
<td>Up to 1/4 in. plate Hot Rolled Steel</td>
</tr>
</tbody>
</table>

* For all other operating conditions, please contact VAW Systems.

---

**Other VAW Systems Products**
- Acoustic Panels and Enclosure Systems
- HVAC Silencers
- Acoustic Louvers
- Turbine Silencers and Filtration Systems
- High Pressure Vent Silencers
- Equipment Bases and Duct Components
Selection Software and Services

- Use FANSIL® Acoustic Analysis and Selection Software – a Powerful Desktop Tool:
  - Most advanced acoustic algorithms in the market.
  - Modern, user friendly interface.
  - Built-in noise source features.
  - Drag’n’Drop icon based analysis grid.
  - Wide variety of noise control product selections.
  - Large size ranges available.
  - Flexible construction options, including special materials & assembly.

We Provide Free Application Engineering Support
INNOVATIVE SOUND SOLUTIONS

VAW Systems has been a trusted name in the noise control industry for over 40 years. Over that time, we have engineered and expanded our umbrella to include all areas of your mechanical system.

**Commercial Silencers**

VAW Systems commercial silencers are optimized for service in all types of commercial and institutional buildings. The noise control equipment may be used for HVAC, cooling towers, exhaust stacks, louver openings, and power generator rooms and enclosures.

**Industrial Silencers**

VAW Systems provides the widest selection of fan noise control products for the industrial ventilation market. The silencers, acoustic enclosures and filter systems may be applied in manufacturing facilities, mining operations, power generation plants, among many other medium to heavy duty air systems.

**Turbine Silencers and Filtration Systems**

VAW Systems is the leader in engineered noise control solutions for the gas turbine industry. Our discharge and intake ventilation silencers, stack silencers, filter houses and related systems are in operation throughout the world – on land and sea.

**Applications Engineering Support**

Our team enjoys supporting our customers with timely application engineering support. We use modern acoustic analysis and product modelling tools, backed by our extensive research and development program that is focused on the total system solution.

VAW Systems tests, designs and builds innovative silencers and related noise control products. We are always striving to reduce the size, complexity and total pressure losses of the solution provided to your mechanical system. Our noise control solutions are integrated into your system design – not the other way around!
Contact us to learn more about the value that we provide, and the ways we may help mitigate your noise control risk.

**VAW Systems Ltd.**

1300 Inkster Boulevard
Winnipeg, Manitoba R2X 1P5
Tel: 204-697-7770
Fax: 204-697-7789
info@vawsystems.com
vawsystems.com