COMMERCIAL NOISE CONTROL PRODUCTS

...catching the wave!
Meeting the Challenge of Change...

VAW Systems is a leading designer and manufacturer of Noise Control products. This heritage of excellence in application engineering, product design and manufacturing is kept up to date with continued research and development.

VAW Systems has close association with both Architectural and Consulting Engineering firms in the design and construction of noise control systems for buildings. Successful projects result when noise control is treated as part of the total building system at the design stage and not as a piece of unrelated equipment. Just as building style, function and space utilization require an overall view; several types of noise control products may be necessary to match the specific system design. Compromising the noise control product selection will adversely affect the noise criterion required.

Meeting the Challenge of Innovation...

VAW Systems uses a systems approach to acoustics, we evaluate each of the components of the mechanical system to assure optimum product application, selection and design. This total systems approach allows “Continuous Improvement” of VAW products to successfully meet the demands of the ever changing market.

VAW Systems’ acoustic and aerodynamic database has been compiled from numerous tests performed in house and at independent laboratories, to the ASTM E-477 sound standard and other applicable testing standards.

Meeting the Challenge of Quality...

VAW Systems has earned a reputation as the quality choice in the noise control industry based on innovative design, selection software, competitive pricing, project management and compliance with certified Quality Assurance and Welder Qualification Programs. Successful Quality Assurance is a corporate philosophy which is executed from the contract bidding stage to final shipment and installation of the equipment. VAW is SO 9001 certified and qualified to CWB and AWS welding standards. The quality system at VAW has passed many rigorous internal and external audits, performed by our customers.
TECHNOLOGY & TECHNIQUE

VAW achieves excellence with the right combination of inspiration, innovation, passion and spirit.

COMSIL®: Noise Control Analysis and Selection Software

Years of experience have enabled VAW Systems’ Acoustic Engineers to develop industry leading software, reducing analysis and product design time. The innovative Acoustic Analysis Module provides:

- Calculations based on ASHRAE Algorithms and ISO Standards.
- User friendly inputs with unique drag-n-drop icons in “The Grid”.
- Multiple source, path and receiver choices, including User library - MyComsil™

The modern Silencer Selection Module delivers:

- Selections based on the Analysis Module results.
- Wide range of silencer types, material and construction options.
- Evaluation of alternate selections.
- Generate silencer submittal packages.

Customer Support

Our Customer Service mandate is excellence in client communications, cost management, scheduling and coordination of all project activities. Engineers and Representatives are encouraged to take advantage of our Application Engineering Services:

- Establish appropriate noise criteria.
- Perform an acoustical analysis to determine attenuation requirements.
- Evaluate application issues, including IAQ requirements, space constraints, energy and cost.
- Select the most cost effective product and/or system.

Meeting Our Customers Needs

- Acoustical Performance
- Aerodynamic Requirements
- Structural Requirements
- Cost Effective and Competitive
- On Time Shipping and Delivery

Modern Production Facility

VAW Systems’ multi-skilled unionized personnel utilize a modern 64,000 sq.ft. manufacturing facility in Winnipeg, Manitoba, Canada.
STANDARD SILENCERS

VAW Systems offers a variety of products which can be selected in our Comsil Software by representatives and engineers. All of the silencers that VAW offers are customized to match the ductwork to maximize low frequency attenuation and minimize system effects with the lowest pressure drop.

Rectangular Models
- RSA – Rectangular Straight Absorptive
- RSL – Rectangular Straight Lined
- RSR – Rectangular Straight Reactive

RSA – Rectangular Silencer comes with Flanges, Stainless internals and Galvanized Casing

Elbow Models
- REA – Rectangular Elbow Absorptive
- REL – Rectangular Elbow Film Lined
- RER – Rectangular Elbow Reactive

REL – Rectangular Elbow Silencer with round duct connections

Circular Models
- CSA – Circular Straight Absorptive
- CSL – Circular Straight Film Lined
- CSR – Circular Straight Reactive
- CER – Circular Elbow Reactive
- ACS – Axial Cone Silencer

ACS - Axial Cone discharge with high frequency splitters

Absorptive Silencers are filled with acoustic grade glass fiber and provide broad-band attenuation using aerodynamically designed baffles.

Lined Silencers have the same features of an Absorptive Silencer with the advantage of a film liner to provide protection from potential erosion, moisture, particulate and other contaminants in the airstream.

Reactive Silencers are for applications where Indoor Air Quality is a concern. These products have NO glass fiber media which provide attenuation through tuned chambers.

Axial Silencers have the same features as Absorptive Silencers and are aerodynamically designed for direct connection to the fan.
CUSTOM SILENCERS

VAW Systems is a leader in the Custom Noise Control Industry. Computational Fluid Dynamic (CFD) software and in-house acoustical analysis programs are applied to design unique solutions for the customers’ specific needs.

Design Considerations
• Maximum insertion loss
• Minimal pressure drop
• Work within allowable space constraints
• Access requirements for fire dampers / fusible links
• Transitioning silencers to match changing ductwork dimensions
• Competitive Design / Best Price

Standard / Custom Silencer Construction
• All silencers are available in a variety of material gauges
• Material types range from Galvanized, Hot Rolled Steel, Aluminum and Stainless Steel.
• Absorptive Media can range from formaldehyde Free Fiberglass to High Temperature rated Acoustic Media
• All silencers come standard with a 2 inch slip connection on both ends.

Silencer Construction Options
• Media Protection – film or fiberglass cloth.
• Extended Casings (height and width) for improved low frequency performance and reduced pressure drop.
• HTL (High Transmission Loss) Casings for reduced break-out or break-in noise through silencer casing.
• Connections – flange, slip and drive, TDC Connections.
Acoustic Panels / Enclosures

VAW Systems offers 2 and 4 inch thick tongue and groove acoustical panels. These panels can make a simple barrier wall, an HVAC plenum, or a complex enclosure for noisy equipment such as a compressor. VAW meets the customer’s needs when it comes to providing panels / enclosures. Packages can be shipped knocked down for field assembly or fully assembled with the equipment factory installed. Industrial or Power Plant applications requiring panels or enclosures can be supplied by our Industrial and Gas Turbine divisions.

Materials of Construction

• Hot rolled steel, galvanized, stainless and aluminum
• Structural floors
• Internal structural support steel

Accessories

• Installation manual
• Access door / panels
• Ventilation packages
• Isolation bases
• Electrical / lighting systems

Acoustic Louvers

• Available in 4 to 24 inch depths
• Dimensions to suit site requirements
• Materials - galvanized, hot rolled, stainless steel and aluminum
• Paint finishes also available

Cross-Talk Silencers

• Manufactured in “T”, “L”, “Z” and “U” configurations
• Shape is dictated by the building wall construction details.
• This type of attenuation will allow for transfer of air but not sound
• Installed in the wall or ceiling space between offices
Noise Control is Required
in a Variety of Applications

- HVAC Systems in schools, offices and hospital buildings
- Ventilation in Subway and Traffic Tunnels
- Process air in Industry
- Power Generation Systems

Clean Room

VAW Systems has the ability to handle all of your Clean Room application needs, from preliminary design to being able to manufacture and ship the final product to the Clean Room protocol required.

- Class 10,000 Clean Room used throughout the fabrication, final assembly and packaging stages.
- 3 Levels of Clean Room protocols to suit customer requirements.
- Products are packaged to maintain the level of cleanliness specified during and prior to installation.

Accessories

VAW Systems can also package the accessories required to complete the Noise Control system.

- Fan roll out assemblies
- Paint Finishes
- Flex Connections
- Isolation / Rubber Mounts
- Support legs / stands / brackets
- Transitions to mate the new / existing ductwork with the sound silencers.
VAW Systems strives for excellence in adapting to customers’ Noise Control and Filtration needs with proven custom products and unique computerized engineering solutions.

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