

General Motors Reduces Plant Noise with “Good Neighbor” Fan Silencing

The General Motors plant in Janesville, WI, uses a 132,588-acfm industrial fan in an area of the plant where paint fumes are incinerated. To reduce the fan noise, the GM paint department collaborated with Universal Silencer on a special absorptive fan silencer, which dissipated the sound energy. An added benefit—additional pressure drop for the fan motor was extremely low, less than 1 inch water gauge.

Universal Silencer developed a special fan silencer design for General Motors in Janesville, WI, to reduce noise from an exhaust fan at the plant.

Universal Silencer offers a standard line of rectangular fan silencers with parallel baffles, but was able to adapt the design quickly to the cylindrical configuration needed at GM. The baffles are packed with acoustic material that dissipates the sound energy. This design was well-suited for reducing the middle- to high-frequency noise generated by the fan. The overall sound pressure level of the fan with the silencer installed was less than 55 dB at a distance of 500 feet.

An unexpected benefit of installing the new silencer was improved system performance. The new transition unit and silencer allowed better air flow. As a result, pressure drop across the stack was reduced to less than 1 inch of water gauge, according to measurements of amp draw on the 800 hp electric motor.

For detailed specifications and in-depth information about this design, or for information about creative solutions to noise problems, call Universal Silencer and ask for Industrial Sales.

Universal Silencer has been providing acoustic silencing and filtration solutions for over 40 years. Universal Silencer supports a fully equipped Product Development Center for exploring new materials and methods of manufacture,



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Installation of the Universal Silencer 86-inch-diameter cylindrical silencer with parallel baffles at the General Motors plant in Janesville, WI. Universal Silencer offers a wide range of standard products for a variety of fan applications.

and for qualifying the performance of filters and silencers.

Universal Silencer also manufactures air filters and silencers for blowers, gas turbines, vacuum pumps, valves, and engines. Universal Silencer is an ISO 9001 registered firm and ASME Code certified.

Keeping industrial equipment clean and quiet.



UNIVERSAL SILENCER

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