

Fiberglass Baffles Reduce Reverberated Noise Levels



A common dilemma facing the metalworking industry is how to limit worker exposure to machinery noise at levels in excess to OSHA standards without sacrificing worker productivity. One such solution has been applied successfully by Manth-Brownell, Inc. of Kirkville, New York, an automatic screw machine shop.

Manth-Brownell had been cited by an OSHA inspector for excess noise levels in the main work area, levels which reached as high as 96 dBA during an average eight-hour shift. Excess noise levels were particularly prominent near eight of the shop's most active Davenport multi-spindle screw machines. The 12-foot (366 cm) ceiling height caused additional problems, carrying reverberated machinery noise into other work areas.

Plant manager Wesley Skinner, Jr. called Kinetics Noise Control for help.

The solution was the installation of Kinetics Model KB-803 Noise Control Baffles, 2 ft. by 4 ft. by 1-1/2 in. (61 cm x 122 cm x 38 mm) compressed fiberglass absorption panels. Sealed within a white vinyl film covering, the baffles have a UL84 Class 1 fire retardant rating.

The baffles were suspended from steel cables run between the supporting beams of the roof and installed in a honeycomb matrix throughout Manth-Brownell's machine shop. The work was accomplished during working hours with no machine downtime. The results were instantaneous, says Skinner.

"Installation of the Kinetics baffles has given us the ability to efficiently move our people within their work areas at no loss of productivity while maintaining average noise levels well within OSHA's standard," he says. "In fact, in many work areas, we have achieved reduction of ambient noise by as much as 8 dBA."