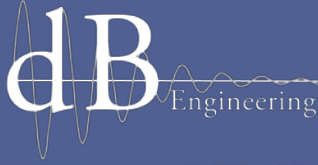


Noiseless Metal



Noiseless Metal (NM) is laminated metal designed to reduce vibrations and noise transmission in metal constructions. It consists of two sheets of metal bonded together by a thin viscoelastic damping layer. NM can be made using any commercial quality steel or aluminum.

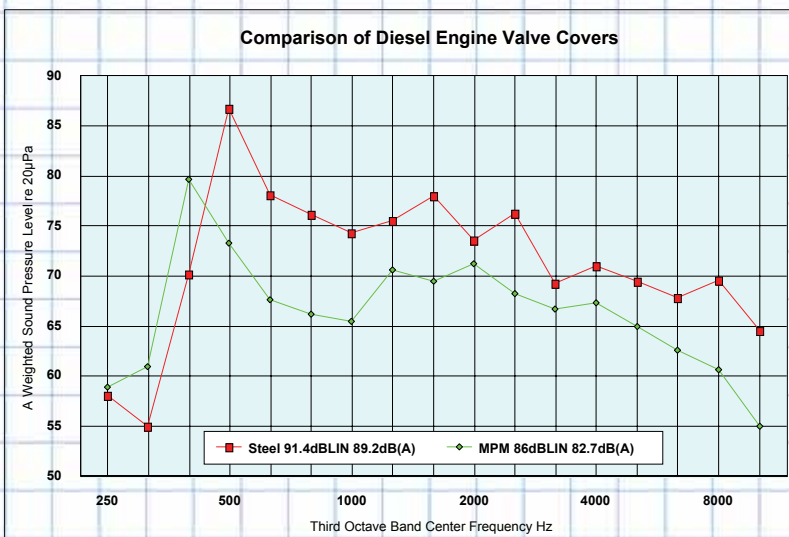
The structure-borne sound damping qualities of the viscoelastic core are temperature dependent. For this reason, NM panels are supplied with cores optimized for different temperature ranges, depending on the applications in which they are to be used. Standard products have viscoelastic cores optimized for room temperature, 50°C, 80°C and 100°C. In this way it is possible to achieve maximum damping of structure-borne sound when they are built into various products such as internal combustion engines, washing machines, office machines and vehicle bodies.

The two metal facing sheets in NM panels are usually of Cold Rolled Galvanealed Steel, but in principle any type of metal or alloy can be used, as can other surface-treated sheets of various kinds. The metal facing sheets are usually of the same thickness, but a certain amount of asymmetry is permissible without any loss of acoustic properties.

Noiseless Metal serves a dual function. It damps structureborne sound, and it replaces the sheet that would otherwise be used in various applications, usually without it being necessary to accept an increase in the thickness of the materials. Noiseless Metal can often eliminate the need for special screening or sound absorption, which would otherwise take up a considerable amount of space and increase the weight of a product.



Areas of Application



Propulsion Systems

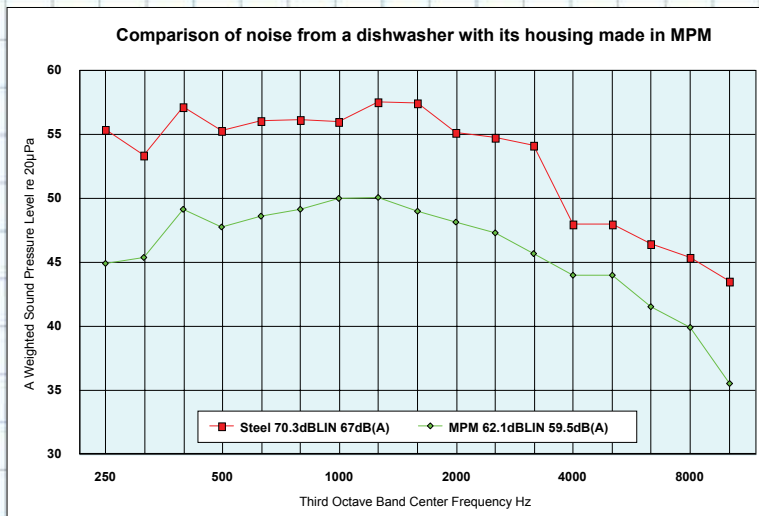
NM panels are used as standard products in items such as

- Rocker covers, transmission covers and oil pans
- Engine shields and enclosures
- Ventilation ducts for air-cooled engines
- Gearbox cover covers and oil pans

**Call 1-800-nonoise
(1-800-666-6473) for
Free Samples and Engineering**

Noise Barrier / Vibration Damping

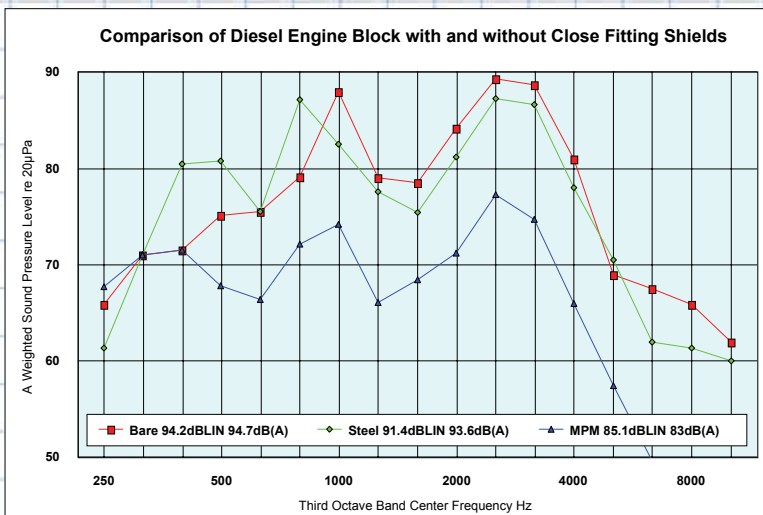
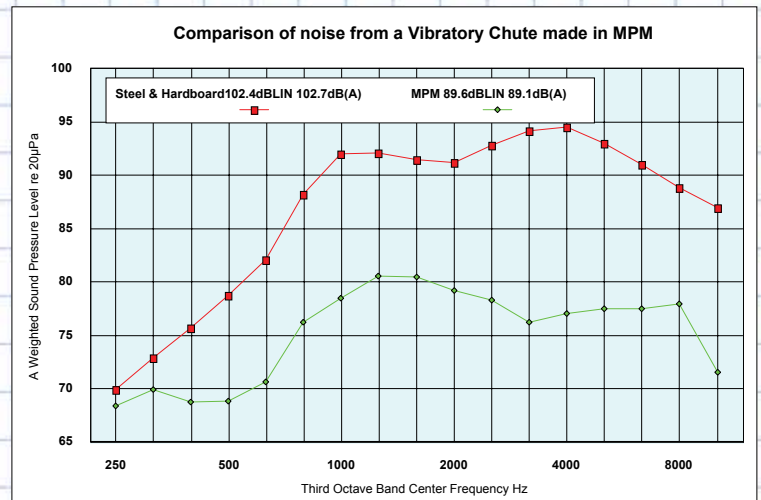
Office Machines And Domestic Appliances



Noiseless Metal is used in computers, printers and other office machines in which damping of structure-borne sound is essential. Even the quality of record players and loudspeaker units has been considerably improved by using NM panels in their construction. Where domestic appliances are concerned, the structure borne sound damping properties of NM are used for damping the noise from dishwasher cabinets and other kitchen equipment.

Factory Noise

In a factory, Noiseless Metal is used for machinery guards, vibrating feed units, conveyor belts, bottling machines, press hoods and rubbish containers. Manufacturers of plastic mills have found that NM offers the only effective means there is of reducing the noise of milling. And, as the laws relating to the environment at work become more stringent, there will be even more areas of application for NM.



Vehicle Bodies

Vehicle body components for trucks, vans and cars, pressed or drawn in Noiseless Metal, offer better damping and less transmission of noise from other components. By using NM in the panels that are the predominant source of noise, it is possible to reduce the volume of extra materials required and at the same time save space, weight, assembly time and money.