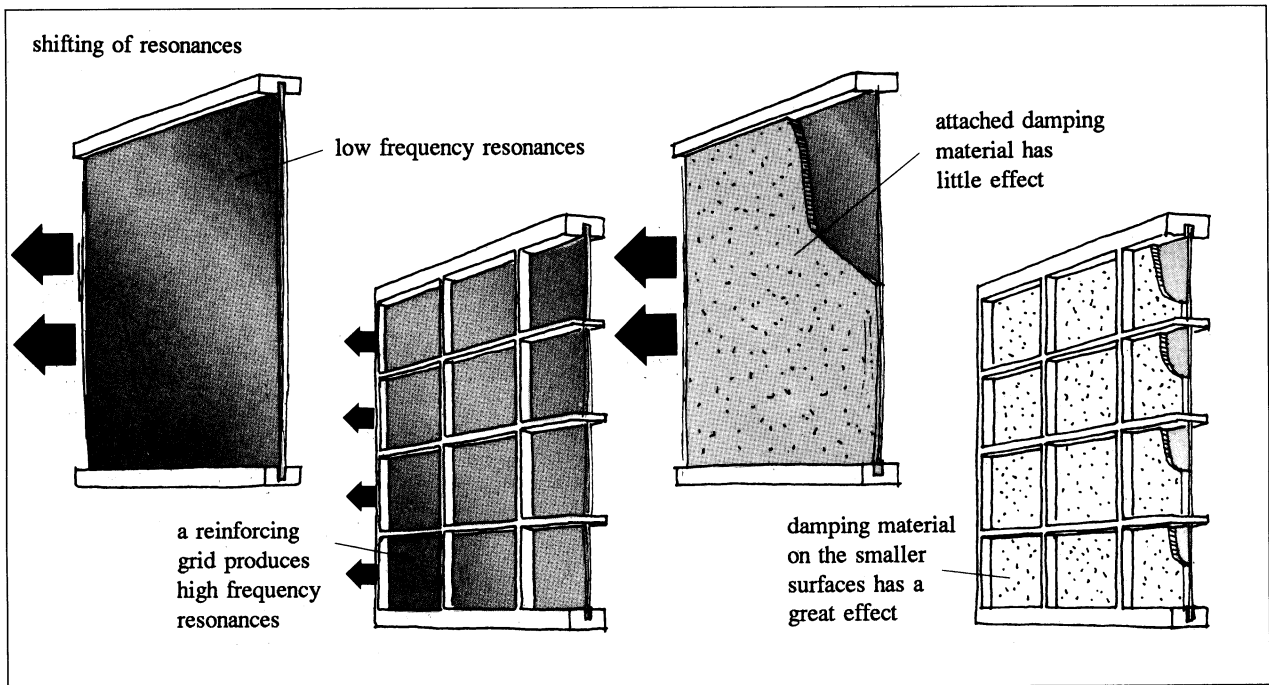


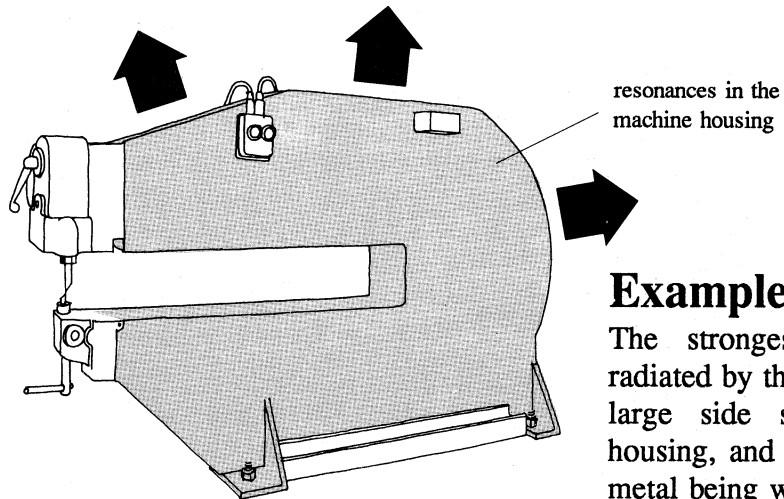
RESONANCE SHIFTED TO HIGHER FREQUENCY IS MORE EASILY DAMPED

Large vibrating plates often have low frequency resonances which can be difficult to damp. If a plate is stiffened, the resonances are shifted to higher frequencies which can be more easily damped.

Principle



Application to a machine housing



Example

The strongest low frequency sound radiated by this machine comes from the large side surfaces of the machine housing, and not, as expected, from the metal being worked.

Control Measure

The sheet metal sides of the housing are stiffened with metal straps. A damped plate (total thickness 2 mm) is installed over the straps.

