

MAFUND Insulation Sheets – Protection against Vibrations and Structure-borne Noise

Insulation system from G+H Noise Control has sheets to absorb periodic and sudden impact on machinery



Insulation

Fire Protection

Noise Control

Challenge

The operation of machinery involves the propagation of mechanical vibrations and structure-borne noise into the ground where it creates tremors. This can make the machinery susceptible to malfunctions and may therefore reduce its life, so that it is vital to protect the relevant components sufficiently from vibration.

Customer

Druckzentrum Mittelrhein-Verlag,
Koblenz, Germany

Project

Vibration isolation for the base of a
printing machine

Project Data

Sprung mass: 2,140 metric tonnes
Tuning frequency: 38 Hz



The MAFUND insulation system from G+H Noise Control consists of ready-made and customized sheets produced from highly elastic, load-absorbing single rubber bearings and filler material serving as permanent formwork (no need for dismantling and cleaning). It can therefore be mounted directly onto machines of all sizes and types. The material also reduces any vibration amplitudes and impact transmission during the startup and shutdown of a machine. Due to the high load-bearing capacity of the sheets it is usually suffi-

cient to cover only part of the surface, concentrating on the machine's centers of gravity. Therefore, the required system volume can be calculated with perfect accuracy. If the machine or its base frame is not rigid enough, a suitable intermediate base must be added between the machine and the insulation sheets. This ensures rigidity and optimum load distribution while also adding further insulation. Depending on the specific needs, it is also possible to install the system on the side panels of the base.



CHALLENGE

- Reduce the transmission of vibration and structure-borne sound
- Prevent system failure

SOLUTION

- Insulation sheets to reduce periodic and sudden tremors
- High elasticity and load-bearing capacity
- If torsion resistance is inadequate, the system can be enhanced to add a torsion-resistant intermediate base.

ADVANTAGES

- Minimum use of materials with major insulating effect
- System allows perfect adjustment to suit the relevant load-bearing points
- Extends the life of machinery
- Less expensive than full-surface insulation