

**Akustik +
sylomer**
by getzner



ISOLATION OF MACHINERY IN FACTORIES

AMC
MECANOCAUCHO

ABOUT AMC MECANOCAUCHO

Aplicaciones Mecánicas del Caucho (AMC) is a company that designs and produces anti-vibration mounts as well as noise insulation composites for the industrial and building sectors.

Since 1969 we have been developing noise and vibration solutions for a wide range of applications. To meet the demands of each project our products combine the properties of different isolating materials such as rubber, metal, springs and Sylomer.

Our dedicated engineering team is on hand to offer technical support with vibration calculations and product advice. On our website akustik.com you will find access to an extensive range of technical data for our products as well as calculation tools such as our acoustic mount selector. This tool allows the input of your system specifications and provides recommendations for ceiling and floor mounts to meet the requirements of your project. Our library of acoustic test data is also available to view using our dB finder tool, this provides detailed acoustic data we have obtained for various ceiling, wall and floor systems.

With a wide variety of clients served from across the world, We provide tailored acoustic solutions for your application.



AMC Solutions for Factories

Noise and vibration

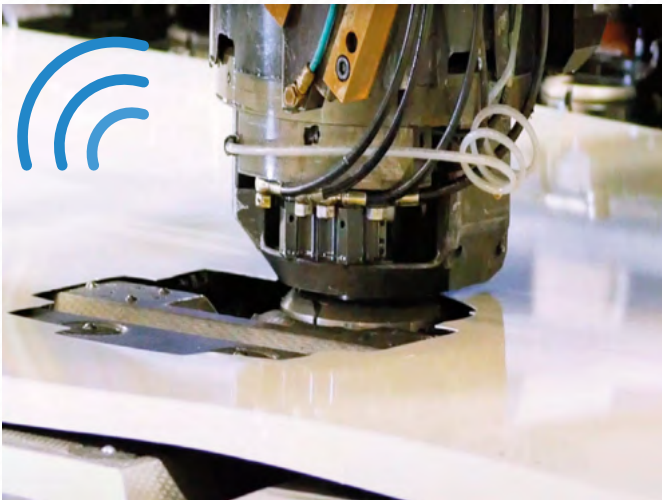
INDUSTRIAL MACHINERY

Factories using **high-accuracy, high-productivity machinery** gain a clear competitive advantage. However, this type of equipment often requires a **low-vibration environment** to maintain efficiency and optimize cycle times and operating costs.

Industrial machinery can generate **unwanted noise and vibration**, which may negatively affect accuracy, reliability, and service life. Excessive vibration can also create an **uncomfortable working environment**, impacting worker health, comfort, and productivity.

NOISE AND VIBRATION IN INDUSTRIAL MACHINERY

However, equipment such as **laser cutters, hydraulic presses, and lathes** can generate **unwanted noise and vibration**, which may disturb workers in nearby offices and production areas.



QUALITY PROBLEMS

Improving efficiency and reducing downtime are often **key priorities** for meeting production targets. Machines such as laser cutting systems, hydraulic presses, machine tools, and 3D inspection equipment can be sensitive to vibration, which may affect their performance and accuracy.

AMC Solutions for Factories

Machinery in factories

Industrial processes can be extremely complex, and their sources may be diverse and difficult to identify. Here are some examples of common sources of vibration and noise disturbances.

1

PRODUCTION MACHINERY

Presses / Machine Tools



2

AUXILIARY EQUIPMENT

Gensets, HVAC, Ducts...

2

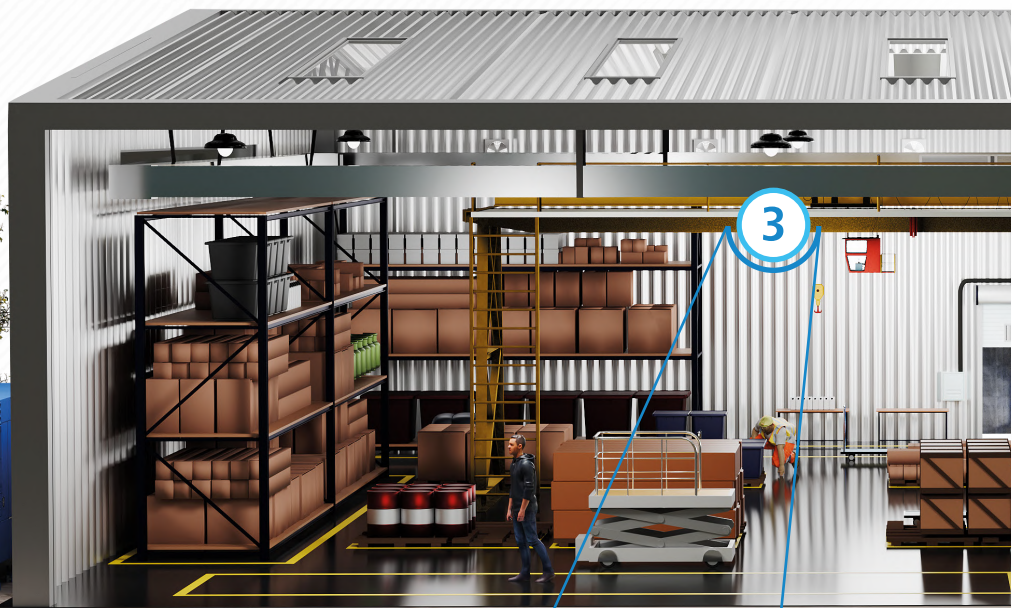


3

HOISTING EQUIPMENT

Factory Bridge Crane

3



SOUND-INSULATION
OF INDUSTRIAL MACHINERY



In industrial facilities, **significant sources of vibration** can often be identified that require proper isolation. If not adequately controlled, these vibrations may cause disturbances in nearby offices or adjacent facilities. **Complaints arising from such disturbances can lead to significant financial consequences or even operational shutdowns.**

4

LIFTING EQUIPMENT

Industrial Elevator

5

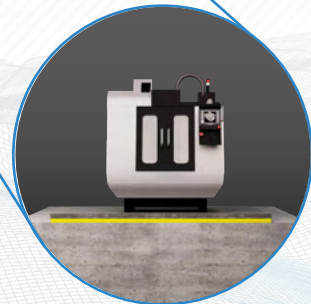
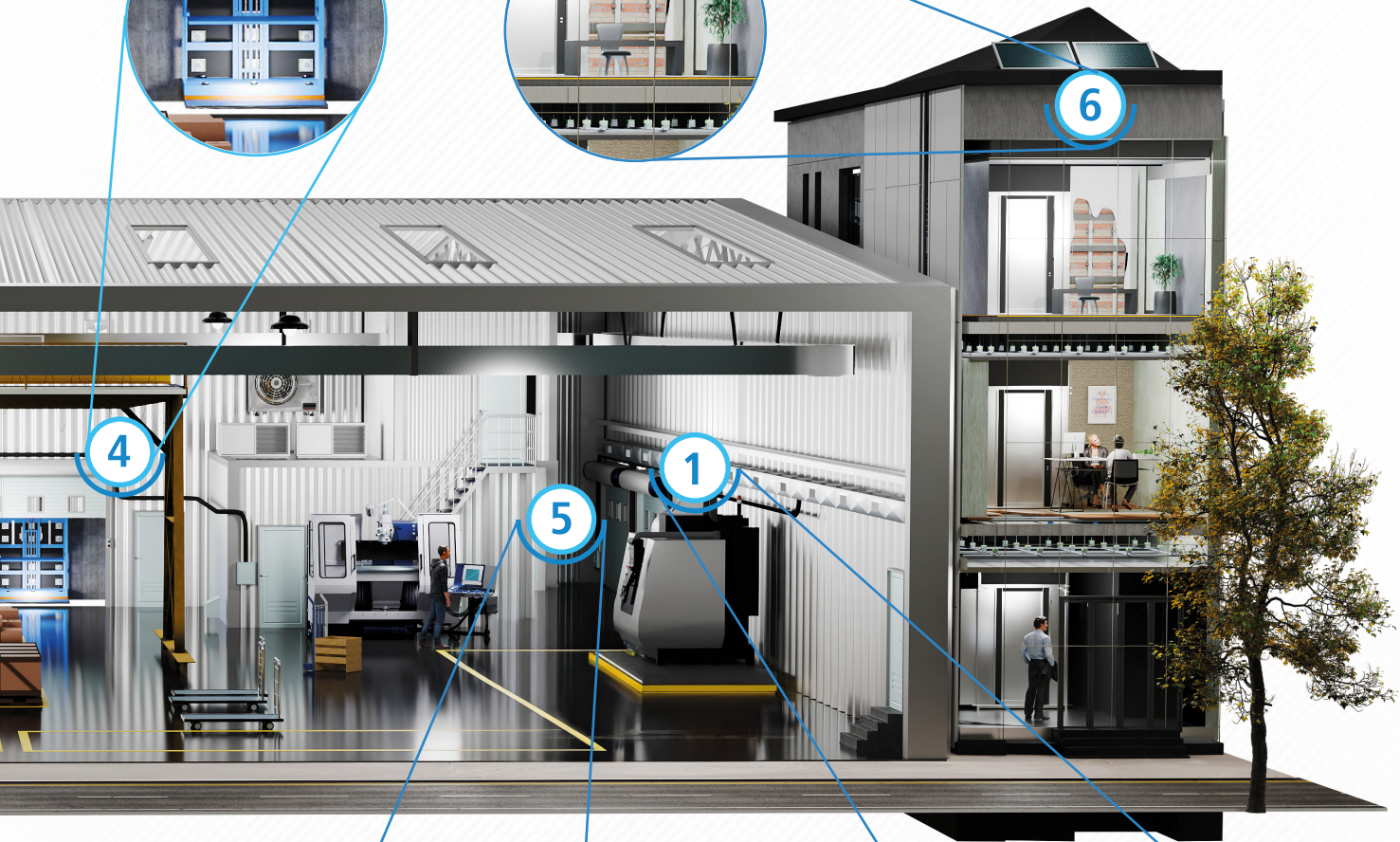
FACTORY DOORS

Garage/Factory Doors

6

BOX IN BOX

Offices and Workplaces



AMC Solutions for Factories

Presses and Machine Tool

Equipment such as presses and machine tools are significant sources of noise. The following section describes the **most common isolation systems**.

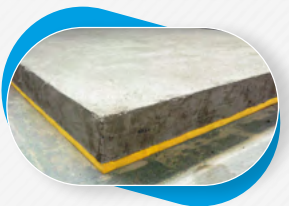
1 SOLUTION



sylomer®

Highly effective anti-vibration material that is easy to install. The suspended slab prevents the formation of acoustic bridges, which are very common in machine rooms.

Due to the wide range of loads possible in this type of room, Sylomer® can be adapted to different load ranges, from 0.1 kg/cm² to 12 kg/cm²



2 SOLUTION

MORE INFO



SPRING +Sylomer®

ANTI-SEISMIC WITH VISCOUS DAMPER

Allows damping ratios above 30%

Resistance against extreme corrosive environments

High vibration isolation for static gense applications



AMC Solutions for Factories Auxiliary Equipment- Gensets



Emergency GENSETS

ISOLATION OF GENSETS

Emergency gensets provide **critical backup power during outages**, ensuring the continuous operation of essential systems. Due to the nature of these installations, it is essential that they remain reliable when sudden power demand occurs.

Selecting the **correct mounts for an emergency generator** is crucial to ensure **reliable operation** and to **prevent issues that could lead to machine downtime**.

BRB Rubber mounts

ANTI VIBRATION MOUNT



SEE ANTI VIBRATION MOUNT

Marine Engine mounts

ANTI VIBRATION MOUNT



SEE ANTI VIBRATION MOUNT

BSB Rubber mounts

ANTI VIBRATION MOUNT



SEE ANTI VIBRATION MOUNT

Anti-seismic visco Spring+Sylomer

ANTI VIBRATION MOUNT



SEE ANTI VIBRATION MOUNT

AMC Solutions for Factories

Airborne Noise

Akustikabsorber Foams

Acoustic foams for noise reduction

MORE INFO



PYRAMIDAL FIRE-RESISTANT

AKUSTIKABSORBER SOUND INSULATION

COMPOSITION:

M-1 class fire-resistant melamine honeycomb foam

THICKNESSES:

30mm 50mm



PAVIABSORBER

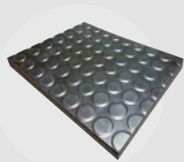
AKUSTIKABSORBER
SOUND INSULATION

COMPOSITION:

Antiskid Mat, absorbent polyethylene foam and visco elastic heavy mass of 5kg / m2 interleaved.

THICKNESSES:

15mm



AGLO PI

AKUSTIKABSORBER
SOUND INSULATION

COMPOSITION:

Fiberglass facing and bound polyurethane foam with a density of 150 Kg/m3.

THICKNESSES:

15mm 25mm



FAIM

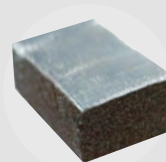
AKUSTIKABSORBER
SOUND INSULATION

COMPOSITION:

Aluminium facing with fibreglass support, M-1 fire-resistant polyurethane foam, 5 Kg/m² viscoelastic mass.

THICKNESSES:

15mm 25mm



SEE MORE ABOUT
PAVIABSORBER



SEE MORE ABOUT
AGLO PI



SEE MORE ABOUT
FAIM

MORE INFO



VISCOELASTIC LAYERS

AKUSTIKABSORBER SOUND INSULATION

COMPOSITION:

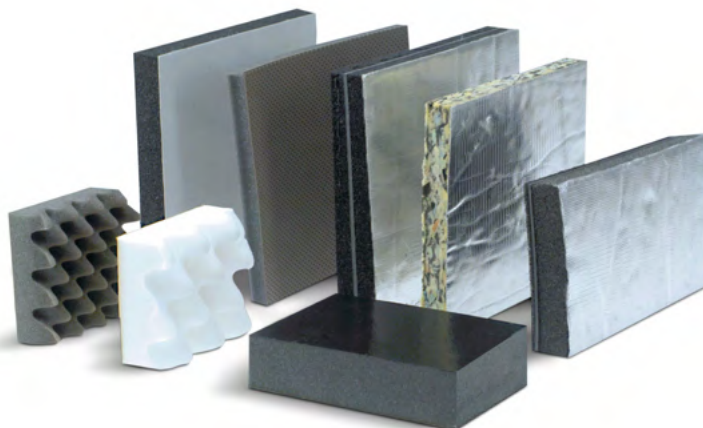
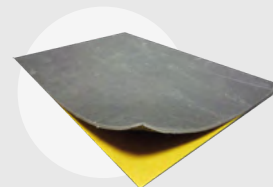
Rubber elastomer compound mixed with Barite.

THICKNESSES:

MP5: 2.6mm / MP 10: 5mm

SHEETS:

1230x1030 mm



AMC Solutions for Factories

Auxiliary Equipment- Transformers

1 RUBBER TO METAL SYSTEMS

MORE INFO



RUBBER SOLUTION

AMC rubber anti-vibration mounts reduce vibration and structure-borne noise in transformers and auxiliary equipment, improving system reliability and protecting supporting structures.



2 SPRING + SYLOMER SYSTEMS

MORE INFO



SPRING MOUNT SOLUTION

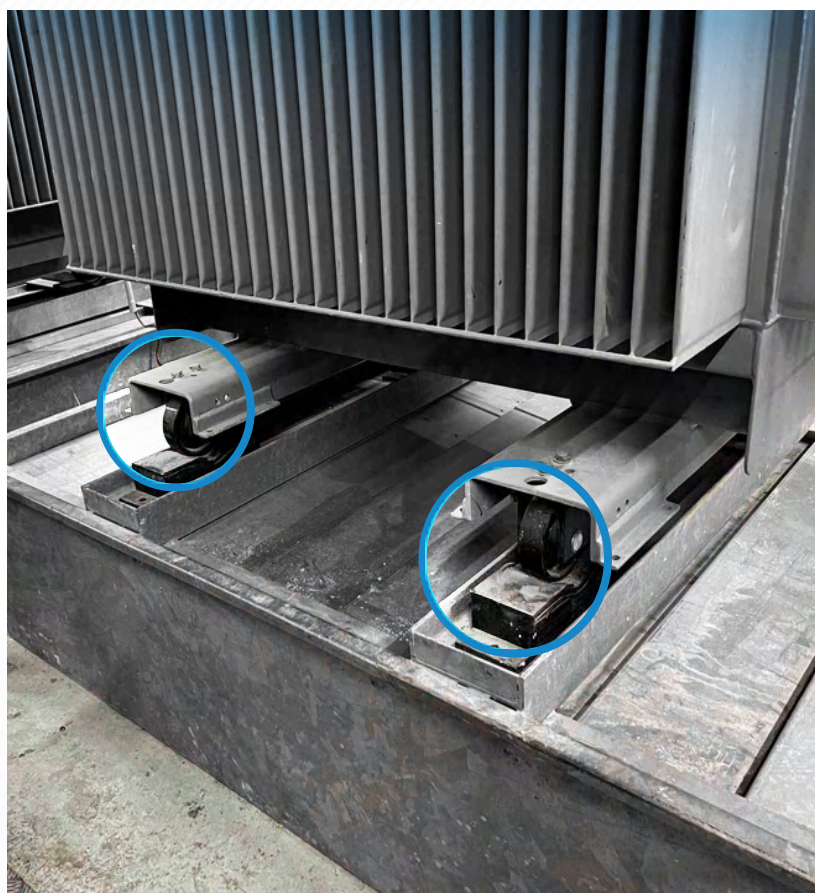
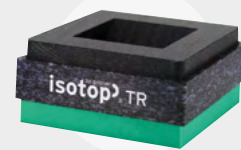
AMC spring mount solutions utilise mechanical spring isolation to effectively attenuate low-frequency vibrations in rotating and reciprocating machinery, reducing transmitted forces to adjacent structures and improving overall vibration control performance.



3 SYLOMER SYSTEMS

SYLOMER SOLUTION

AMC Sylomer® solutions provide high-performance vibration isolation for transformers, particularly at low frequencies, ensuring stable load distribution and effective reduction of structure-borne noise.



AMC Solutions for Factories

Auxiliary Equipment- Pumps - Compressors

MORE INFO



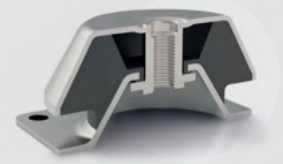
RUBBER TO METAL

BRB ANTI-VIBRATION MOUNT

Fail-safe protection for mobile applications.

Top metal hood protects the rubber from damage from oils, fluids, Ozone...

Baseplates are engraved with the type and hardness.



SPRING +Sylomer®

VIBRABSORBER + SYLOMER

High vibration isolation for static genset applications.



SPRING +Sylomer®

ANTI-SEISMIC VIBRABSORBER

Suitable for installations which require interlocking metals which provide a fail safe design

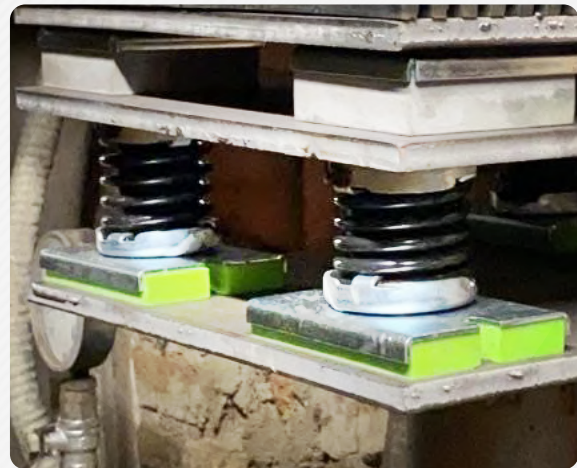
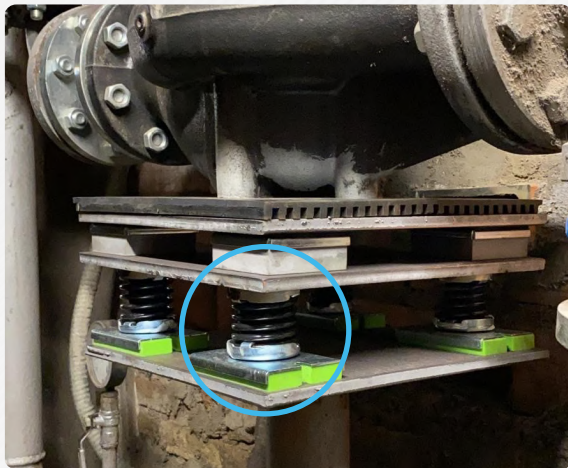
Height adjustable for onsite levelling.



SEE ALL VIBRABSORBER SPRING MOUNTS



SEE ALL VIBRABSORBER ANTI-SEISMIC SPRING



AMC Solutions for Factories

Industrial Cold - HVAC

Akustik Ceiling




Isolation of HVAC equipment

V-SR



Isolation of chillers

V-SH



Isolation of Ventilation systems for subways

V-SH Antiseismic



Isolation of air ducts

SRS + Sylomer



Rubber-metal mounts




Vibrabsorber Spring Mounts






FZ + Sylomer®




TSR + Sylomer®



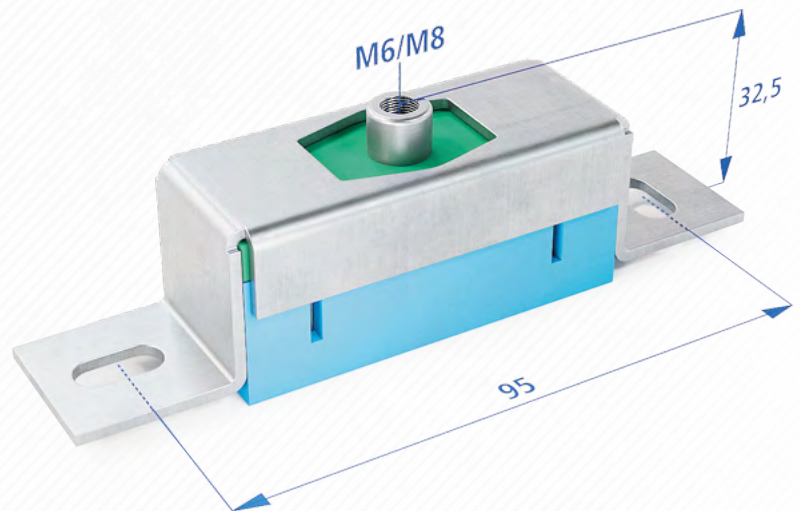
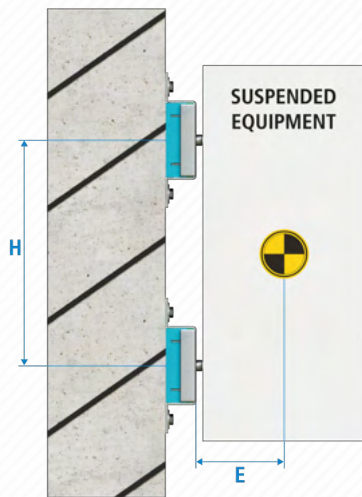
AMC Solutions for Factories Electronics

INSULATION OF CONTROL CABINETS

Vibrations can **loosen electrical components**, leading to **contact failures**, sparks, or short circuits. They may also affect the accuracy and reliability of control cabinets, potentially damaging differentials or circuit breakers. **This increases the risk of fire due to overheating in damaged connections.**



Akustik +Sylomer®**WF**



AMC Solutions for Factories

Pipes and ducts

A **poorly insulated duct** can transmit **vibrations and noise**. When the conveyed gas or liquid is critical to the process, anti-vibration systems help ensure continuous operation and improved productivity.

This page shows the different types of supports used for duct insulation.

WALL TIES AND PIPE CLAMPS



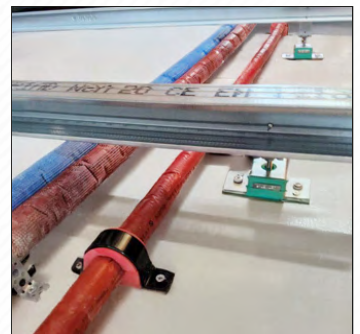
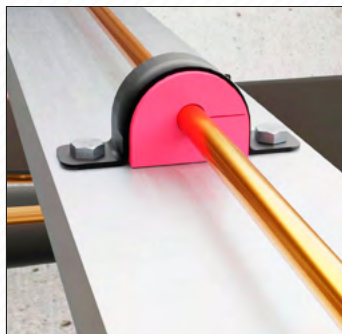
EP +Sylomer®

Acoustic wall ties designed for the suspended installation of ducts. They are fixed to the wall using two mounting holes and include a metal insert.



Akustik Pipe Omega

This anti-vibration mount is made of Sylomer® and can be supplied with holes of different sizes to suit each duct.



AMC Solutions for Factories

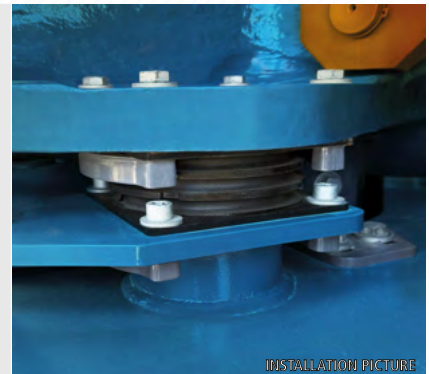
Bridge Crane

BRIDGE CRANE ISOLATION

Vibrations generated by overhead crane operation can **affect the factory structure**, particularly **sensitive elements** such as **ceilings, walls, and foundations**.



- Many factories operate precision machinery that is highly sensitive to vibration
- Extended service life of the bridge
- Noise reduction
- **Performance optimization:** Vibration isolation improves control of the overhead crane



Isolation of Heavy Load Elevator

ELEVATOR SOLUTIONS

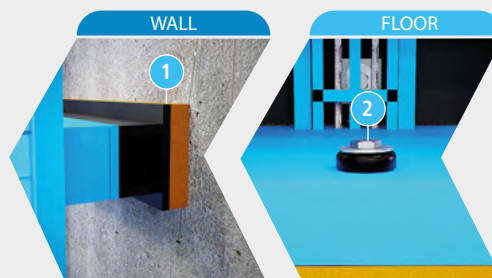
In addition to the sources mentioned above, **elevators that are rigidly connected to the building structure** can also be a **significant source of noise and vibration** for neighbouring areas.

To prevent this, it is necessary to **decouple both the elevator base and the guide rails**, for which two different isolation systems are used.

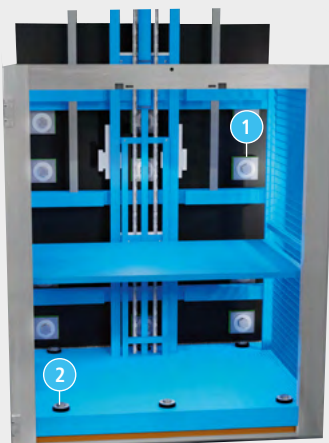
1 OPTION



Support on both sides of the wall.



2 OPTION

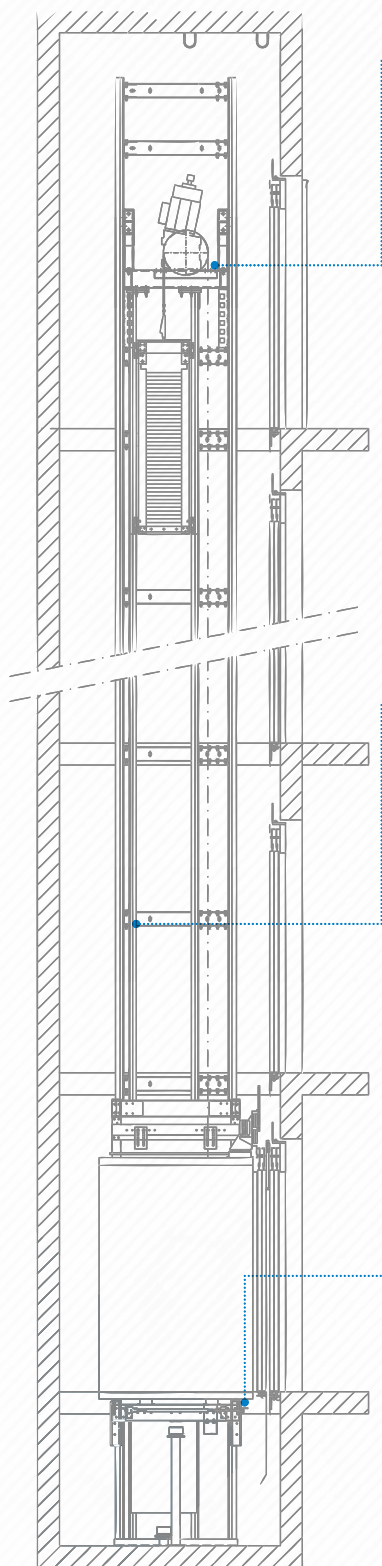


Sheet metal is used on only one side of the supporting wall to fix the guide. For this reason, **large metal plates** are required. On the opposite side, an additional **Sylomer®** layer and **small metal plates** are used to prevent acoustic bridges between the screws and the wall.



AMC Solutions for Factories

Lifting and material handling equipment

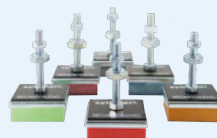


FRAME MOUNTS FOR MACHINE ROOM

Sylomer®



TSR 70X70

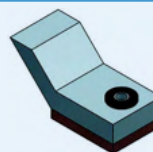


MOUNTS FOR GUIDES

SCB
Anti vibration
mounts



Sylomer®



CABIN MOUNTS

1 AMC 230

1 AMC 700



AMC Solutions for Factories BOX IN BOX of Offices

BOX IN BOX SOLUTIONS

The **main shop floor** can be a **significant source of noise** due to the movement of trolleys, speech, and music. **To prevent noise transmission**, this area should be decoupled using the **box-in-box method**.

This approach provides elastic separation of the floor, walls, and ceiling from the main building structure.



AMC Solutions for Factories

Factory doors



Isolation of the **garage door structure**. If the vertical guide rails come into contact with the floor, **elastic decoupling with Sylomer®** is recommended to prevent vibration transmission.



REAL PHOTO



RENDER

VIP ACCELEROMETER BLUETOOTH

Bluetooth triaxial accelerometer for quick and easy vibration measurements.

When used with the **Vibration Isolator Pro app**, it enables measurement at the vibration source and receiver, calculation of the isolation percentage, and visualization of FFT spectra, all from a mobile device.

Bluetooth
accelerometer





Our **expertise** lies in the **Building** and **industrial acoustics** field, with a dedicated **technical department**. We have skilled engineers situated across various countries who are prepared to comprehend your specific situation and offer suitable solutions. Don't hesitate to **get in touch with our main office** or **explore our websites** and social media platforms.



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