

VIBRATEC

Industry

Sound, Shock & Vibration Technology for the Industry Sector



Quietly Improving Your Environment

©VIBRATEC 2025

Vibration Technology for the Industry Sector



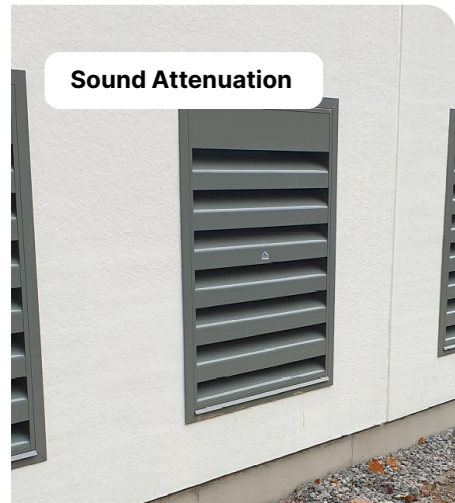
Pipe Suspension



Constrained Layer Damping



Tuned Mass Dampers



Sound Attenuation



Machinery

Read more about our products and solutions on our website!

Vibratec offers a wide range of sound, vibration and shock isolation products, designed to meet the demanding needs of the industrial sector. Our solutions cover all critical areas, from machinery and power generation equipment to pipelines and sensitive components.

Our products are built to withstand the harshest industrial environments, ensuring reliable, long-term performance and minimizing downtime.

In addition to our standard range, we offer customized solutions tailored to meet specific customer needs. Whether it's vibration isolation for machinery or shock damping for sensitive equipment, Vibratec provides the optimal solution for your industrial applications proof special isolators. We use materials that are unaffected by factors such as temperature, light, oil and gases.

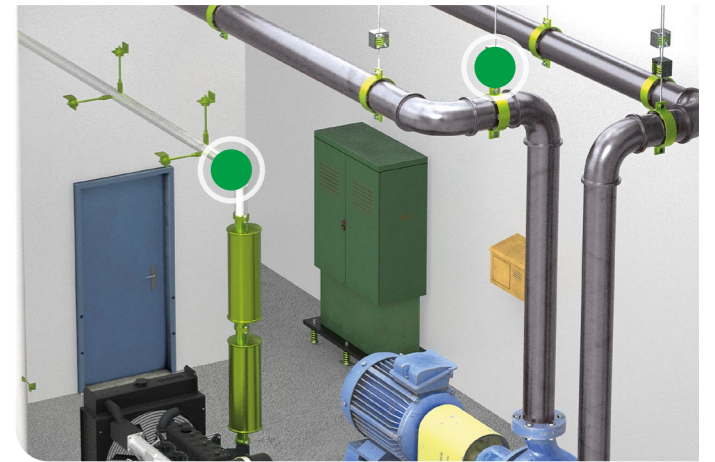
Pipe Suspension with Vibration Isolation

Pipe suspension with Vibratec's isolators plays a crucial role in industrial applications by mitigating vibration-related issues.

These isolators effectively reduce noise, prevent equipment damage and enhance overall system reliability. By isolating pipes from structural components, they minimize the transmission of vibrations caused by machinery, fluid flow or external factors.

Maintaining proper pipe suspension with Vibratecs isolators ensures a quieter and more stable environment, reducing the risk of fatigue failure and extending the lifespan of equipment. This is particularly vital in industries such as manufacturing, petrochemical and power generation, where consistent performance and operational safety are paramount.

Additionally, Vibratecs isolators contribute to improved worker comfort and productivity by minimizing the impact of vibration-induced fatigue and discomfort. Their versatility and effectiveness make them an essential component in industrial settings, enhancing both operational efficiency and occupational wellbeing.



Ceiling Hanger VT-RFH

[Read more on our website](#)



Spring Hanger VT4523

[Read more on our website](#)



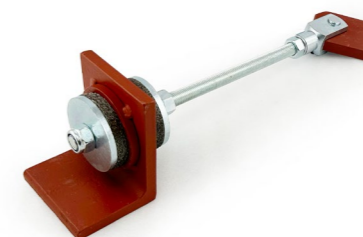
Spring Hanger VT4524-4X

[Read more on our website](#)



All Metal Mount VTCl-series

[Read more on our website](#)



Metal Pendulum Mount 345P

[Read more on our website](#)



Pipe Clamps VTPC-100-900

[Read more on our website](#)

Sound Attenuation

Sound attenuation is the process of reducing noise levels in various environments to create quieter and more comfortable spaces.

At Vibratec, we specialize in providing effective solutions for sound attenuation across marine, industrial and offshore applications. Our comprehensive range of products includes silencers, which minimize noise produced by exhaust systems, louvers that control airflow while reducing noise transmission, and noise enclosures designed to isolate noisy equipment and processes.

Whether you're looking to comply with noise regulations, enhance working conditions, or reduce environmental impact, our sound attenuation solutions offer reliable performance and exceptional noise reduction capabilities. Explore our range to find tailored solutions for your specific noise control needs.



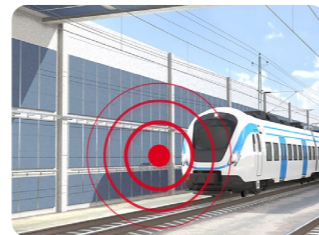
Acoustic Louvers



Noise Enclosures



Silencers



Sound Absorbers



Acoustic Louvers

Louvers offer a good protection for air intake and exhaust openings to technical installations. The louvers are suitable for commercial and industrial construction, infrastructure, offshore and shipbuilding industry.

- Louvers for high-, medium- and low voltage areas
- Transformer- and switching stations
- Transformer substations for gas
- Gas storage spaces
- Engine rooms and rooms for compressors
- Emergency power supply aggregate rooms
- Parking garages
- Prefab enclosures
- Special louvers for offshore applications

Silencers

A silencer, also known as a muffler, plays a crucial role in reducing noise produced by exhaust systems in marine, industrial and offshore applications..

By employing various sound absorbing materials and specialized designs, silencers dampen the exhaust gases' sound waves, effectively attenuating noise levels. This not only enhances working conditions for personnel but also minimizes environmental noise pollution.



Noise Enclosures

Sound insulating enclosures reduce the transfer of noise between the source and the recipient.

At Vibratec, we understand that every environment demands a unique solution to noise management. We offer both basic modular concept system and custom made solutions tailored to meet specific requirements for sound reduction, fire resistance properties and material choice.

Flexible Modular Designs

Our noise enclosures are easy to assemble and available in aluminum, galvanized or AISI 316 steel, with options for increased panel thickness for superior sound insulation.

Customization Available

We adapt our designs to meet your specific needs, ensuring our enclosures meet your expectations.

Assured Quality

We measure final sound reduction post-assembly to guarantee performance.

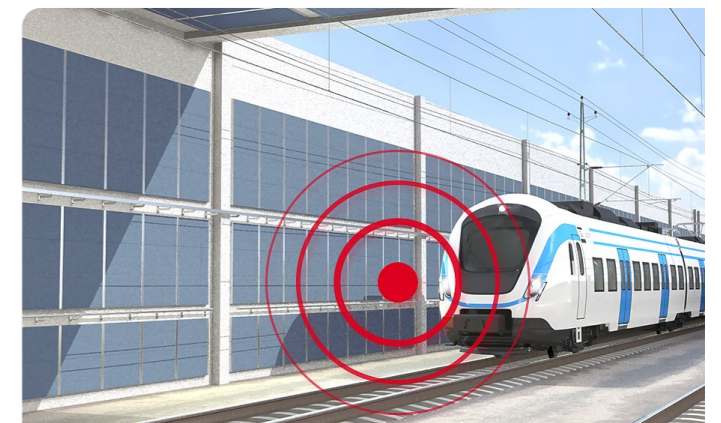
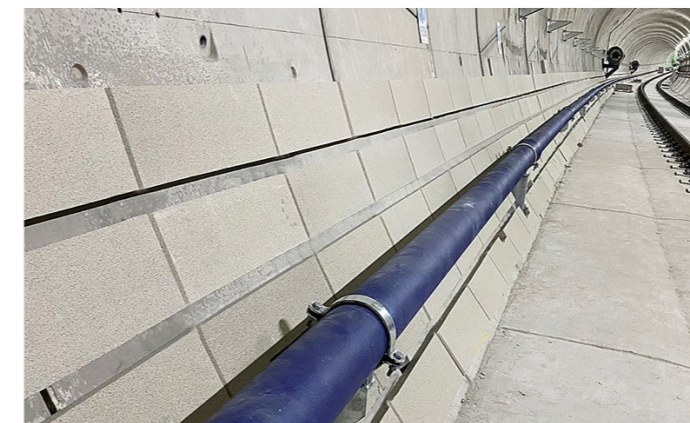
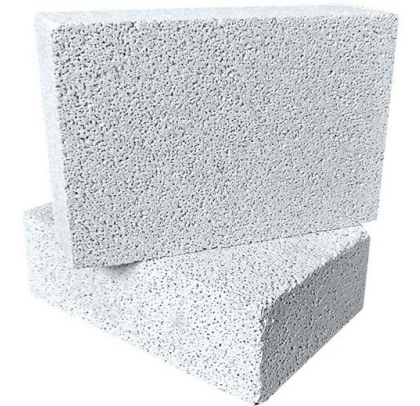
Discover how Vibratec can help quiet your space. Contact us to discuss your needs and find the ideal noise control solution.



Sound Absorber Reapor®

Reapor® is an eco-friendly sound absorber for challenging environments. The panels are hard, lightweight and fibre-free and can be used both indoors and outdoors.

The unique material absorbs noise both between and within the glass granules, resulting in exceptionally high noise reduction. Reapor® is naturally resistant to both moisture and sunlight and requires no extra protection. If exposed to damp conditions, a sodium residue may appear on the surface, which can easily be washed off.



Vibration Isolation for Machinery

Vibratec's isolators are instrumental in the industrial sector, particularly for mounting or suspending heavy machinery.

These types of machines induce heavy amplitude vibrations which is better treated as a series of periodic shocks. A good vibration isolation can be achieved by the use of elastic elements or machine mounts with high internal damping and progressive load-deflection characteristics.

These isolators excel at absorbing and dampening vibrations generated by large equipment like compressors, generators, and manufacturing machinery. By isolating these vibrations effectively, Vibratec's isolators prevent structural damage, reduce noise levels and enhance operational stability.

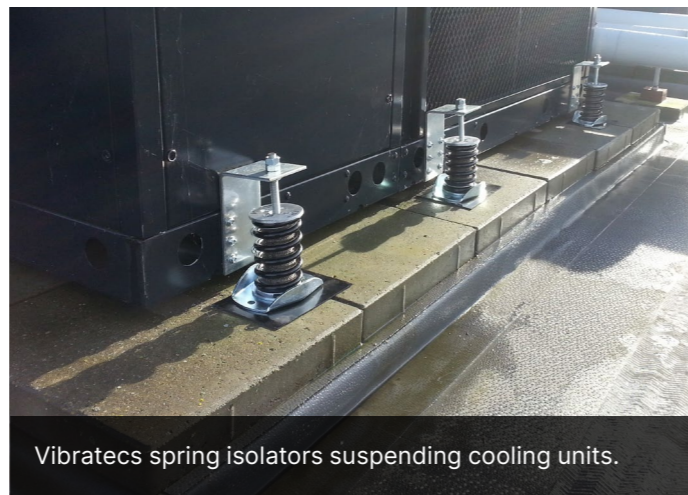
Two-mass systems

We can also assist designing a two-mass system for vibration isolation when the demands for vibration reduction are exceptionally high. This advanced method minimizes vibration transfer by combining two masses with optimized vibration isolators, ensuring superior performance and precision.

Inertia-block

We design solutions with inertia blocks to effectively isolate vibrations from heavy machinery that cause heavy dynamic forces, such as factory looms in the textile industry.

By incorporating a heavy mass, typically made of concrete, combined with damping elements, the inertia block stabilizes the machinery and absorbs vibrational energy.



Vibratecs spring isolators suspending cooling units.

Products



Some of our products suited for vibration isolation of machinery. You can find more products on our web site.

Tuned Mass Dampers

A Tuned Mass Damper – TMD – is a damper that stabilize motion caused by harmonic vibration.

Practical systems are tuned to either move the main mode away from a troubling excitation frequency, or to add damping to a resonance that is difficult or expensive to damp directly. Wide span structures (bridges, stairs, roofs) can be excited to high vibration amplitudes in one of their basic mode shapes, for example by wind or people walking.

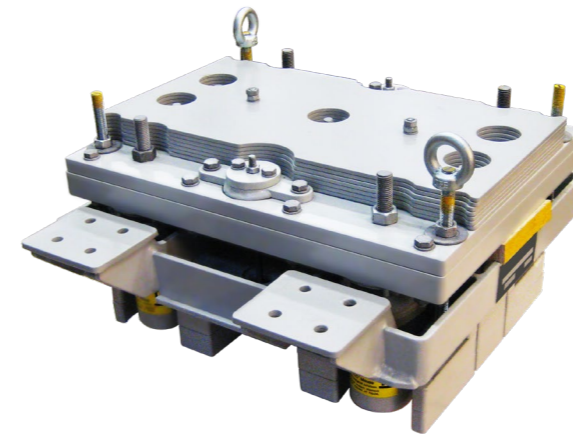
Low natural frequencies as well as low internal damping are typical for many of these large structures. With Tuned Mass Dampers these vibrations can be reduced very effectively. A TMD consists of a spring, a oscillating mass and a damper where both the spring stiffness and the mass is adjustable to fine tune the resonance frequency exactly to the structure and its certain natural frequency, meaning each solution is unique.

Based on our successful design, we dimension and manufacture customized TMD solutions on request.

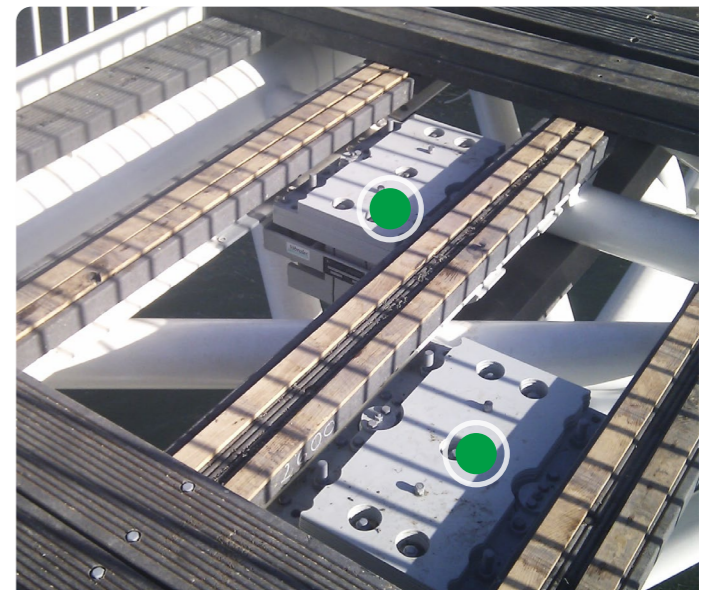
Application types for TMD

Tuned mass dampers are usually implemented in the following typical application types:

- Pedestrian bridges and staircases etc. which can be excited by jumping or walking. Primarily this is a comfort problem and not a structural problem.
- Office floors and similar being excited either by jumping and walking or machinery may cause discomfort as well as structural problems.
- Tall and slender structures, like bridges, chimneys and towers which can be excited easily by wind causing dangerous situations for the structure.



During the structural design of the pedestrian bridge at Baggers Plats in Malmö, it became obvious that it would require a TMD, as the lowest vertical was calculated to 1.85 Hz.



Constrained Layer Damping – CLD



CLD-solutions for Powerstation in Kansas

At the new Rubart power station in Kansas electricity is generated by 12 Caterpillar engines. The air intake filters to the engines were originally designed for another slightly smaller engine type, so after start-up it turned out the larger air flow caused resonances in the steel plates of the filters. The vibration levels were considered to be high, not only causing noise but also risk of fatigue and cracks in the steel plates. Installing our CLD-Tiles Vibrattec reduced the vibrations and met the new requirements of 6 dB IL.



Constrained Layer Damping systems are used to increase damping in stiff structures. A “sandwich” is formed by laminating a damping layer in between two structural constraining base layers.

When the system flexes during vibration, shear stress develops in the damping layer and energy is lost through shear deformation of the material. Varying layer thickness ratios permits optimizing system loss factors for various temperatures without changing the material's composition.

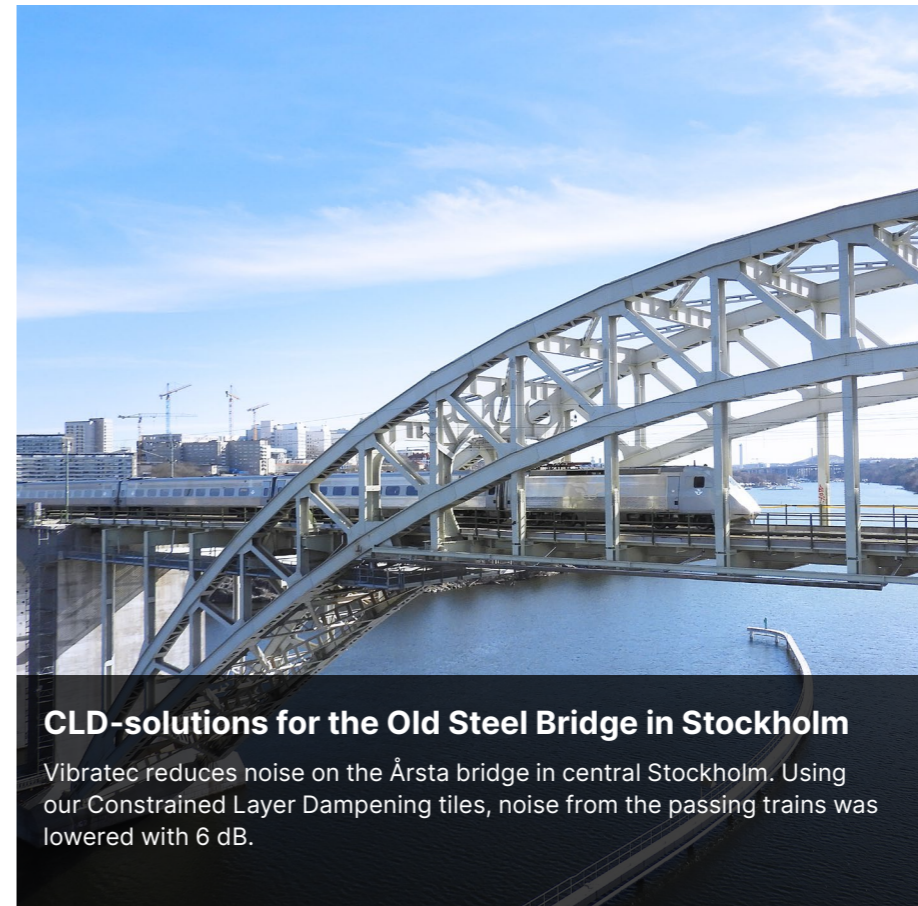
Broad band solution

The CLD-tile is a solution that gives a broad use in both temperature range and in the frequency domain, with a flat damping ratio curve. This means that these work just as well for low, medium and high temperatures as well as for low frequencies and up to approximately 1000 Hz.

Vibrattec can offer several sorts of damping layers cut and punched according to client specification. Also visco elastic glue can be used for sandwich layering.

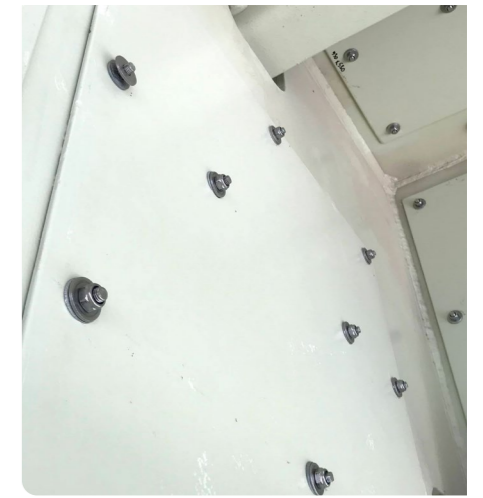


CLD-tiles



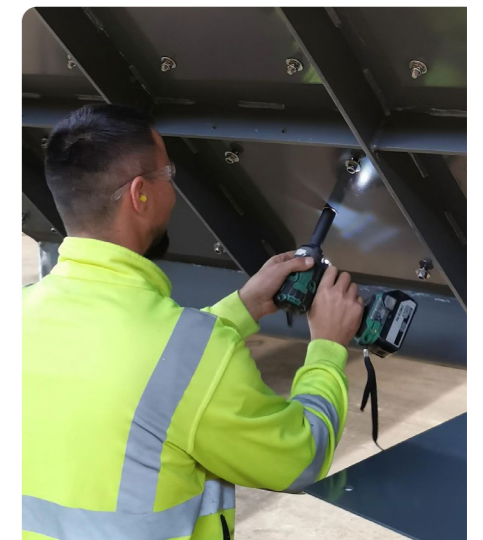
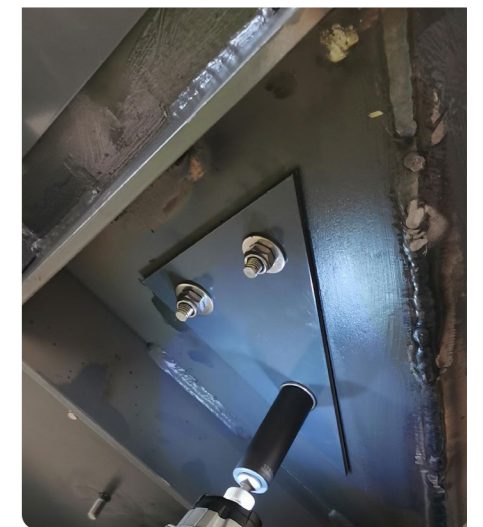
CLD-solutions for the Old Steel Bridge in Stockholm

Vibrattec reduces noise on the Årsta bridge in central Stockholm. Using our Constrained Layer Dampening tiles, noise from the passing trains was lowered with 6 dB.



Installation of CLD-Tiles on a Shute for SSAB

When workers at SSAB dump scrap metals into the chute, high levels of radiated noise occurs. Vibrattec was assigned to apply constrained layer damping on the entire chute. In this case the temperature is in a wide range from -10 C °- +25 C.





VIBRATEC

Quiety Improving Your Environment

Engineering, Production and Installation

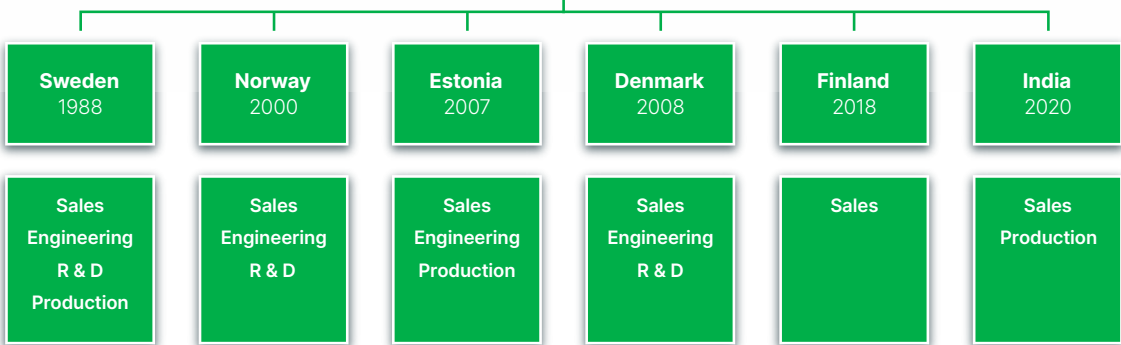
Vibratec has extensive experience, combined with the use of modern tools, when we design and manufacture tailor made solutions in all areas of vibration and noise reduction. Vibratec performs test to evaluate mechanical, physical and long term behaviour on materials as well as complete solutions.

Construction, Defence, Industry, Marine, Offshore and Railway

Vibratec Akustikprodukter is one of Scandinavia's leading suppliers of noise and vibration solutions. Vibratec's ambition is to become the preferred choice for customers who need solutions to noise, vibration and shock problems. Vibratec produce and store many products for damping and isolation of vibration, shock and noise over a wide range of applications.



Vibratec Group



SWEDEN

+46 176 20 78 80
info@vibratec.se

NORWAY

+47 33 07 07 50
info@vibratec.no

ESTONIA

+372 56 62 79 90
info@vibratec.ee

DENMARK

+45 49 13 22 44
info@vibratec.dk

FINLAND

+358 40 258 9117
palvelu@3DI.fi

INDIA

+91 775 599 63 08
rc@vibratec.in