MAURER
Vibration Isolation
State of the art of sustainable solutions
Experience in Innovation

The MAURER Group is a leading specialist in mechanical engineering and steel construction and has been family-owned since it was formed back in 1876. The MAURER Group is currently one of the global technological leaders in steel and plant construction in various specialist fields. We offer products, solutions and services which are particularly notable for their quality, durability and reliability.

Five areas of application for a customized Structural Protection System

Traffic, wind, seismic induced movements of buildings, bridges and complex structures can be controlled through selective use of expansion joints, structural bearings, tuned mass dampers, seismic devices and vibration isolation systems to protect the structures from damage.

We also offer the following services:

**SUPERVISION & TRAINING**
- Inspection
- Maintenance
- Refurbishments
- Training courses

**STATIC & DYNAMIC ANALYSIS**
- FE analysis
- Component testing
- Design planning
- Monitoring
MAURER Vibration Isolation

>> MAURER Structural Isolation

>> TASK
Residential and commercial buildings close to railroad tracks, heavily traveled transportation routes and industrial areas are exposed to vibrations and structure-borne noise. In order to maximize functionality and life quality such disturbances on the structure have to be minimized.

>> MAURER SOLUTIONS
Isolation from microseismic vibrations in vertical and horizontal direction through:

- Spring boxes with/without dampers for isolation systems with tuning frequencies from 2.5 Hz (typical tuning frequencies from 2.5 Hz to 9 Hz)

Smallest vibrations in the micrometer range of the building surroundings are efficiently isolated, thus enabling top-quality manufacturing and measurement.

- Elastomeric bearings for isolation systems with tuning frequencies from 7 Hz (typical tuning frequencies from 7 to 20 Hz)

In this way, stress peaks in the load-bearing structure of wind power plants are efficiently reduced.

>> AREAS OF APPLICATION
- Buildings with highly sensitive measuring systems, e.g. optoelectronic microscopes, equipment for chip manufacturing in semiconductor technology, and laser-based measuring devices.

- Strong horizontal vibrations caused by earthquakes are minimized through a suitable additional horizontal seismic isolation.
MAURER Machine Isolation

**TASK**
Machines and vehicles may cause disturbing impacts into the environment that should be kept as low as possible.

**MAURER SOLUTIONS**
The MAURER vibration isolation of machines minimizes the transmission of vibrations and structure-borne noise into the environment:

- Spring boxes in combination with dampers for isolation systems with tuning frequencies from 2.5 Hz (typical tuning frequencies from 2.5 Hz to 9 Hz)

  ![Spring boxes in combination with damper](image)

- Elastomeric pads for isolation systems with tuning frequencies from 3 Hz (typical tuning frequencies from 3 Hz to 40 Hz)

  ![Elastomeric pads](image)

- Elastomeric bearings for isolation systems with tuning frequencies from 7 Hz (typical tuning frequencies from 7 Hz to 20 Hz)

  ![Elastomeric bearings](image)

**AREAS OF APPLICATION**
- Machines in power plant technology such as turbines, coal mills, crushers, gas or diesel generators
- Metal forming machines such as forge hammers or presses
- Industrial machinery such as industrial crushers, cement mills, printing machines, textile machines or centrifuges
- Routing of railroad tracks
- MAURER has obtained approvals for machinery platforms in nuclear power plants

Vibrations caused by rail transportation are efficiently isolated.
MAURER Services

TEST
On request, our specialists check stiffness and damping under static and dynamic loads, linear-elastic behavior and stability behavior under horizontal displacement in cooperation with recognized testing institutes and universities.

QUALITY MANAGEMENT
Superior quality, reliability and safety of our products and services are the cornerstones of our success. For MAURER, customer satisfaction ranks first and each and every employee lives up to this corporate philosophy. MAURER has been certified according to the international ISO 9001:2008 standard that forms the basis for our quality management system.

ASSEMBLY
Our specialists support you in every project phase with consulting and constructional services. We integrate our systems in your building project professionally and on time.

DESIGN PLANNING AND SOLUTION FINDING
The exceptional strength of our team is its comprehensive technical expertise and its extensive experience. Our engineers have developed solutions for projects exposed to extreme conditions and with extraordinary requirements in regions all over the world.

Test of a spring box

Assembly device for spring boxes