Powerful solutions for vibration control of buildings and structures
Buildings and Structures

Damptech Vibration Control Systems provide the ideal solutions for protection of buildings and structures against earthquakes. The unique rotational friction devices come in different models for different applications with the capacity range from 1 – 5000 kN. Damptech also provides tailor-made solutions to fulfill customer requirements.

International Patents

Advantages

- Flexibility in design, application and installation
- Economical, both direct and indirect cost
- Easy to install
- Capable of dissipating 75% to 90% of the input energy
- Disaster prevention
- Reducing lateral displacement and torsion
- Durable concept and fire-resistant

The novel Damptech devices consist of several steel plates and inbetween sets of high-tech friction pads

- Increasing stiffness and damping
- Applicable for new and existing structures
- Temperature independent

2 floors added to an existing building in Greece

Retrofit of school in India
Builds to any size, capacity and displacement

Damptech devices dissipate the kinetic energy by means of friction generated at the sliding surfaces.

Full scale test in Taiwan

Historic buildings in Japan

Industrial facilities in Greece

Wooden structures

Advantages

- Industrial facilities in Greece
  - Flexibility in design, application and installation
  - Economical, both direct and indirect cost
  - Easy to install
  - Capable of dissipating 75% to 90% of the input energy

Disaster prevention

- Reducing lateral displacement and torsion
  - Durable concept and fire-resistant
Base Isolation
Due to the simplicity of its mechanism and the flexibility of its installation as well as the actual arrangement within the structural framing the Damptech dampers can be successfully used for enhancing the seismic safety of new and existing buildings and structures.

Projects in Japan

- Dissipate large amount of energy at the base
- Handle large displacement amplitudes
- Work in all plane directions
- Act as stopper

5 floors
7 floors
9 floors

3 towers with 40 floors (under construction)

46 floors

Damper arrangements
Large and small displacement
Prefabricated Houses and Buildings

- Flexibility
- Safety
- Risk minimizing
- Easy and economical to install in new houses as well as for retrofit solutions.

Wide range of models

Panel Damper

Beam Column Joint

Damptech R&D Center
Wind Vibration
DampTech dampers can be used efficiently to control wind induced vibrations

- Efficient performance over many cycles
- Can be installed in a small and narrow space
- Temperature independent

Copenhagen International Airport Control Tower

Different solutions
**Pipe Systems**
Due to the simplicity of its effective damping mechanism and the flexibility of its installation, Damptech Vibration Control Systems provide the ideal solutions for protection of pipe systems against earthquakes. Damptech dampers will also provide the perfect solution stabilizing and strengthening pipe systems against mechanical vibrations in factories and power plants.

- Stabilize and protect pipelines - oil, gas, water, etc. - in earthquake prone areas
- Any size of pipe systems

**Shock Absorbers**
By converting the kinetic energy of the impact load into heat Damptech dampers absorb the impact of a moving load and thereby reduce the transmission of potentially damaging shocks to equipment and vehicles.

Damptech shock absorbers dissipate the energy uniformly when a moving load impacts against a resisting force like a wall or a barrier.
Bridges and Elevated Highways
To protect bridges and highways from collapse due to earthquake or traffic induced vibrations Damptech has developed a series of bridge damper models.

Damptech R&D

Test in Japan

Ready for installation

Dampers for bridges and elevated highways
Cable Stay Bridges
As cable-stayed bridges often suffer from large amplitude vibrations it has been vital to Damptech to develop a series of damper models that can reduce the seismic or wind-induced vibration.

Single Cable Dampers
Double Cable Dampers
Four Cable Dampers
Racks and Shelves

Vibrations caused by natural disasters like earthquakes or typhoons often result in the destruction of products stored in warehouses due to the collapse of racks and shelves. To protect the racks and shelves against the dynamic loads, and to protect the workers from falling goods, Damptech supplies damping solutions for racks and shelves.

Protection of goods in factories and warehouses

Protection of furniture at offices and homes
Precast Concrete Structures

Joints of precast concrete structure often suffer successive dynamic loads. Using dampers can improve and strengthen these joints and their performance.

Mechanical Vibration Systems

Humans are very sensitive to equipment-induced vibrations. Damptech supplies various solutions that significantly reduce the vibrations to a level imperceptible to the human being thereby demonstrating the flexibility of the concept of vibration control.