



Powerful solutions for **vibration control** of buildings and structures

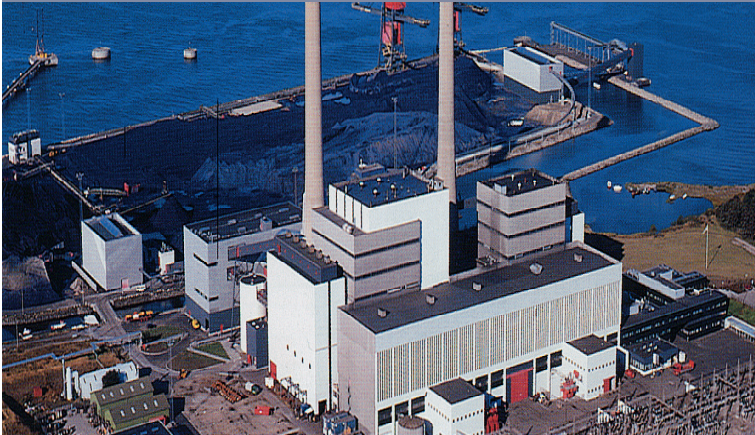


Buildings and Structures

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



Power plant in Denmark

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

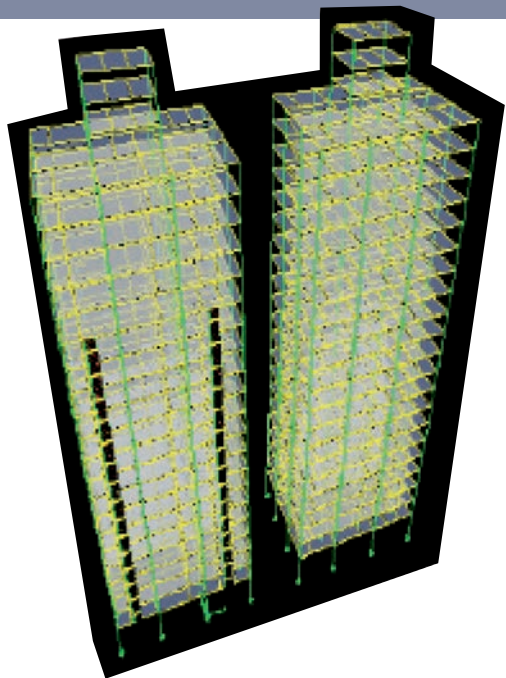
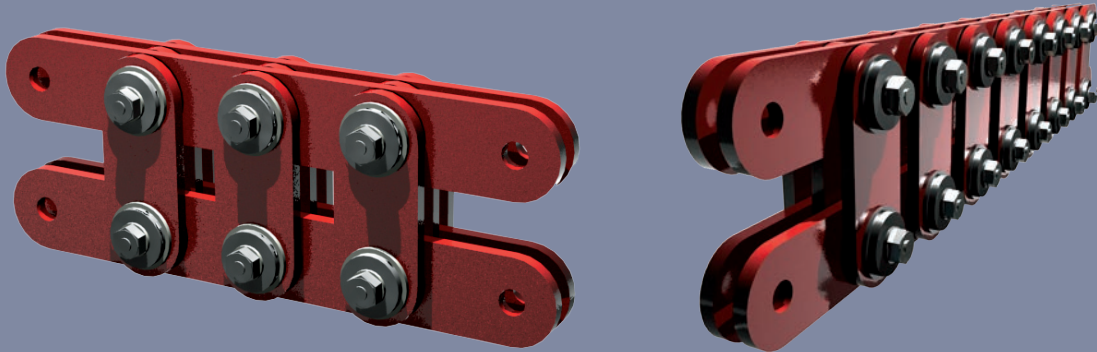


2 floors added to an existing building in Greece



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.



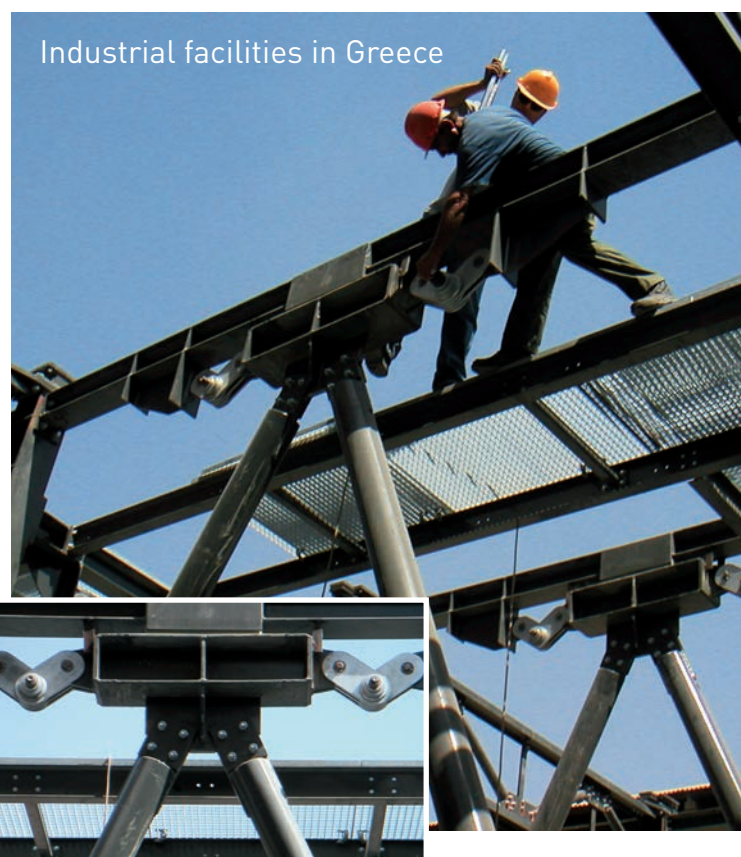
Full scale test in Taiwan



Historic buildings in Japan



Wooden structures



Industrial facilities in Greece

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



46 floors



5 floors



7 floors

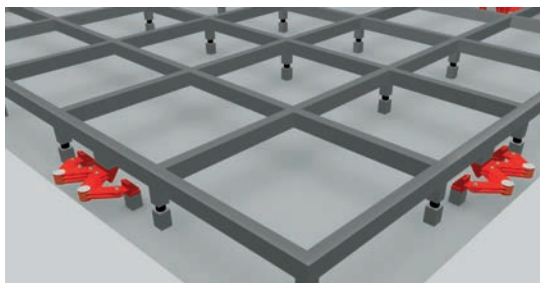


9 floors

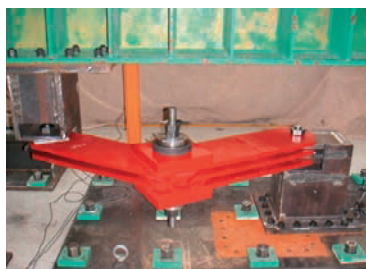


- Dissipate large amount of energy at the base
- Handle large displacement amplitudes
- Work in all plane directions
- Act as stopper

3 towers with 40 floors
(under construction)



Damper arrangements



Large and small displacement

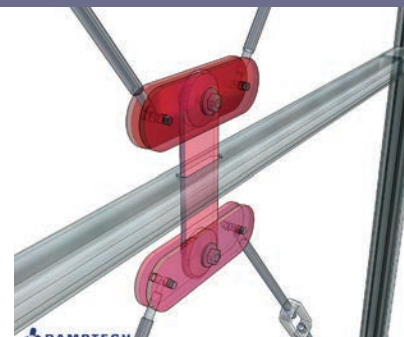
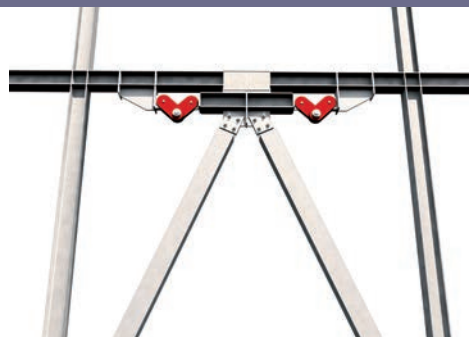


Prefabricated Houses and Buildings

- 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



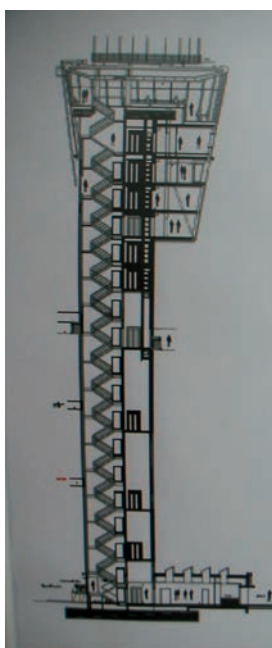
Damptech R&D Center



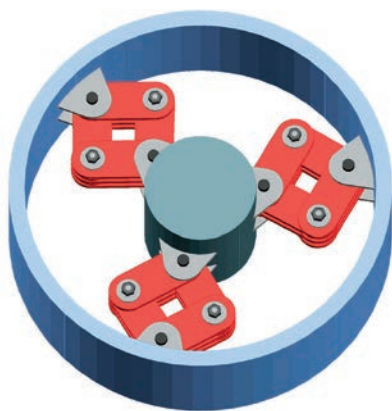
Wind Vibration

Damptech dampers can be used efficiently to control wind induced vibrations

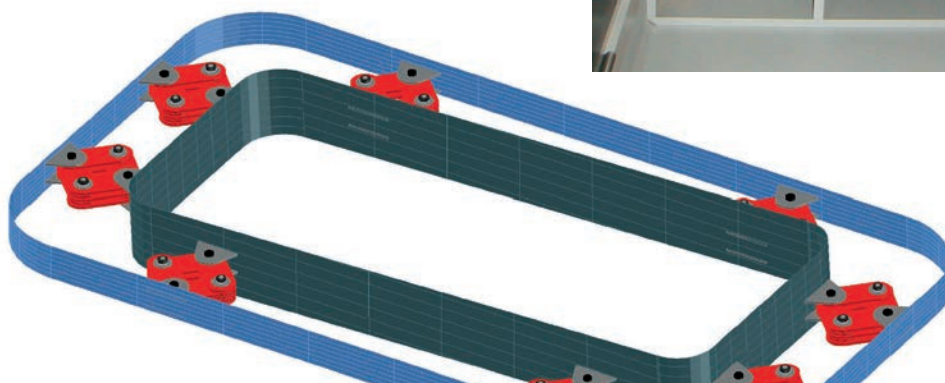
- Efficient performance over many cycles
- Can be installed in a small and narrow space
- Temperature independent



Copenhagen
International Airport
Control Tower

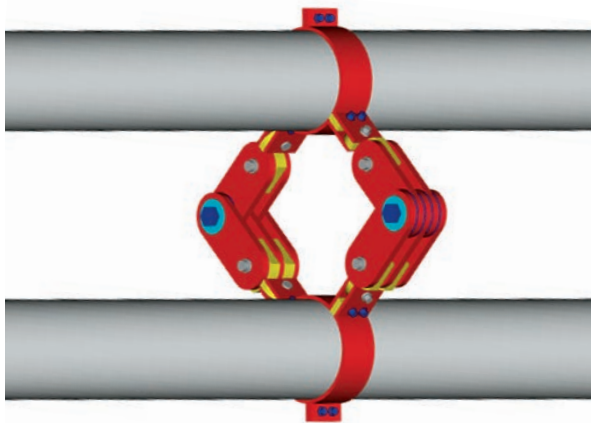


Different solutions

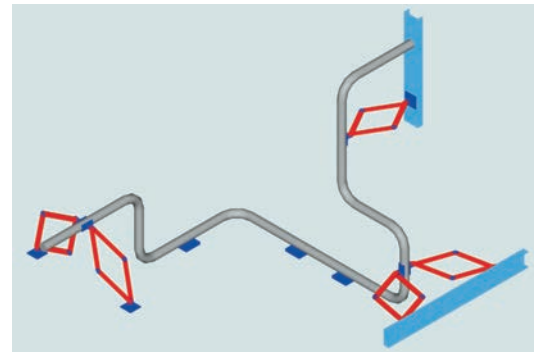
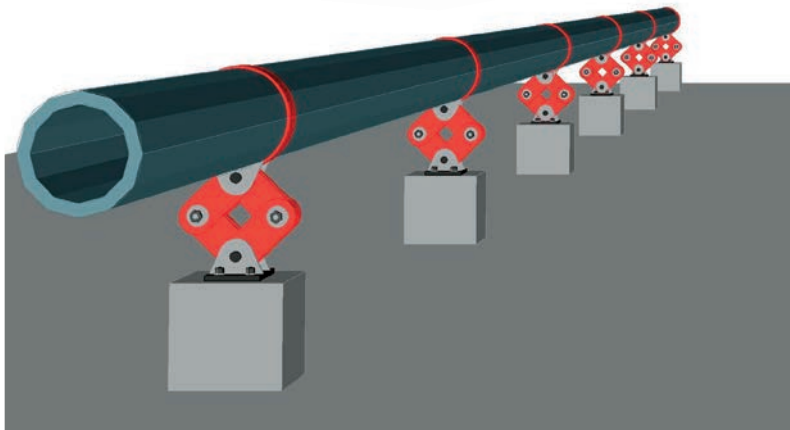


Pipe Systems

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.

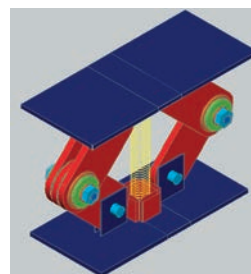


- Stabilize and protect pipelines - oil, gas, water, etc. - in earthquake prone areas
- Any size of pipe systems

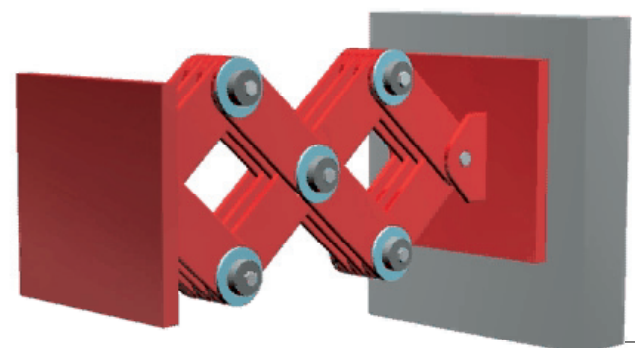
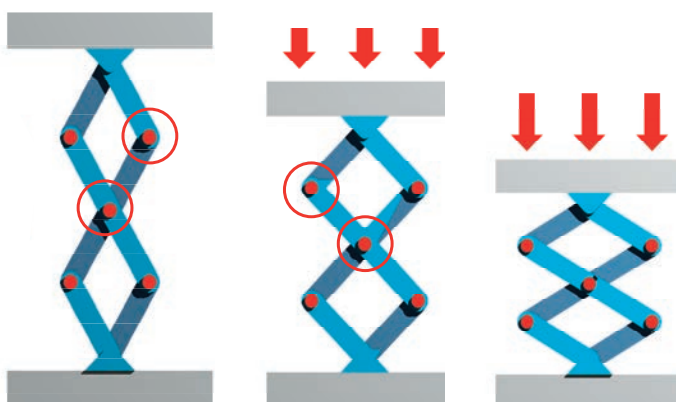


Shock Absorbers

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.

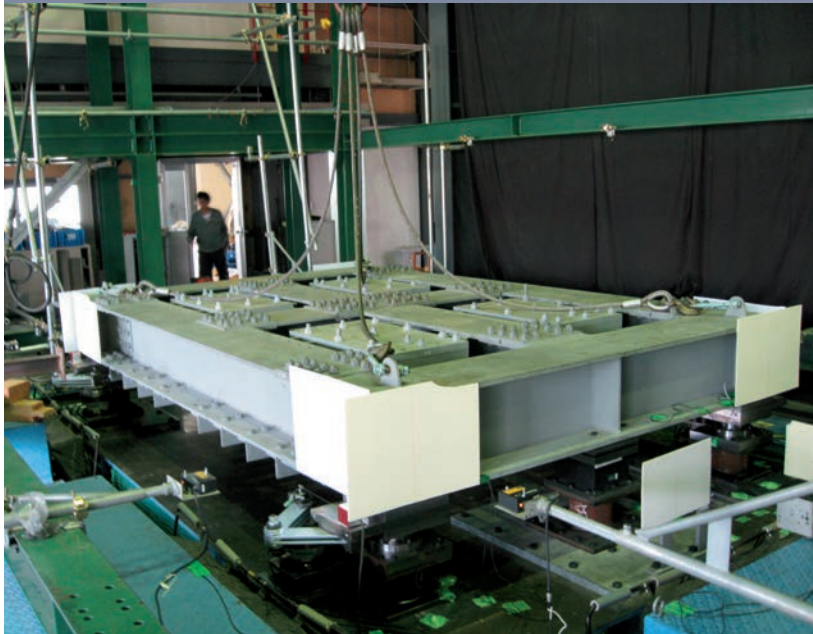


Damptech shock absorbers dissipate the energy uniformly when a moving load impacts against a resisting force like a wall or a barrier.



Bridges and Elevated Highways

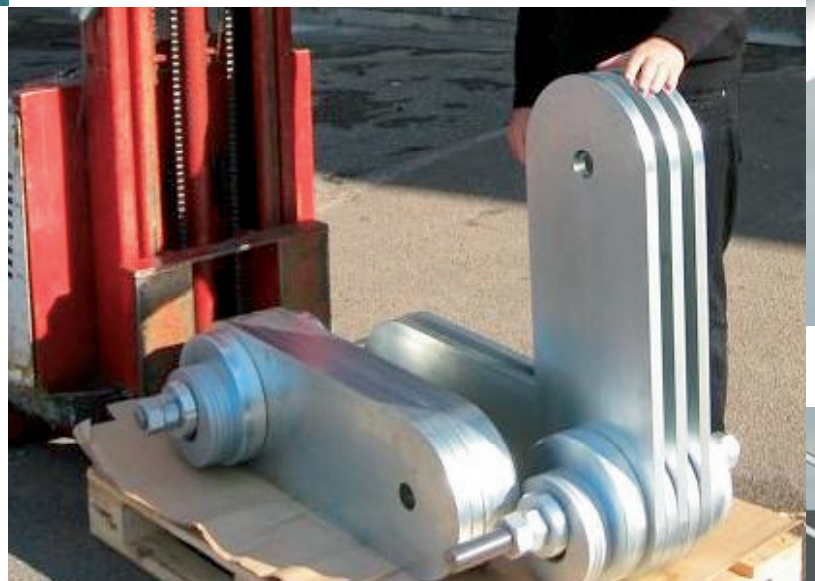
To protect bridges and highways from collapse due to earthquake or traffic induced vibrations Damptech has developed a series of bridge damper models.



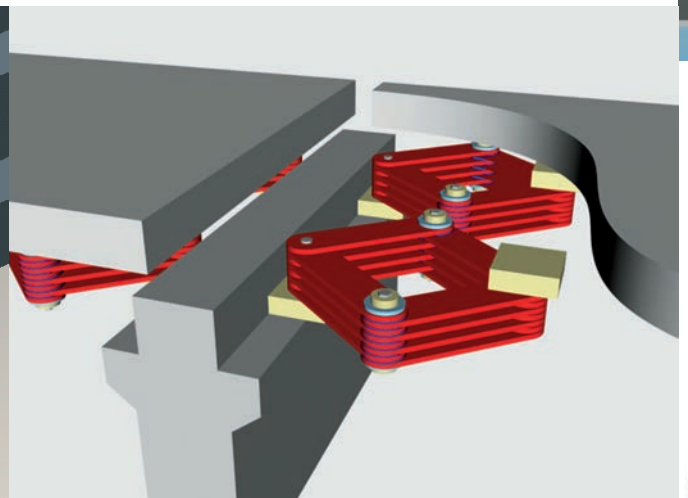
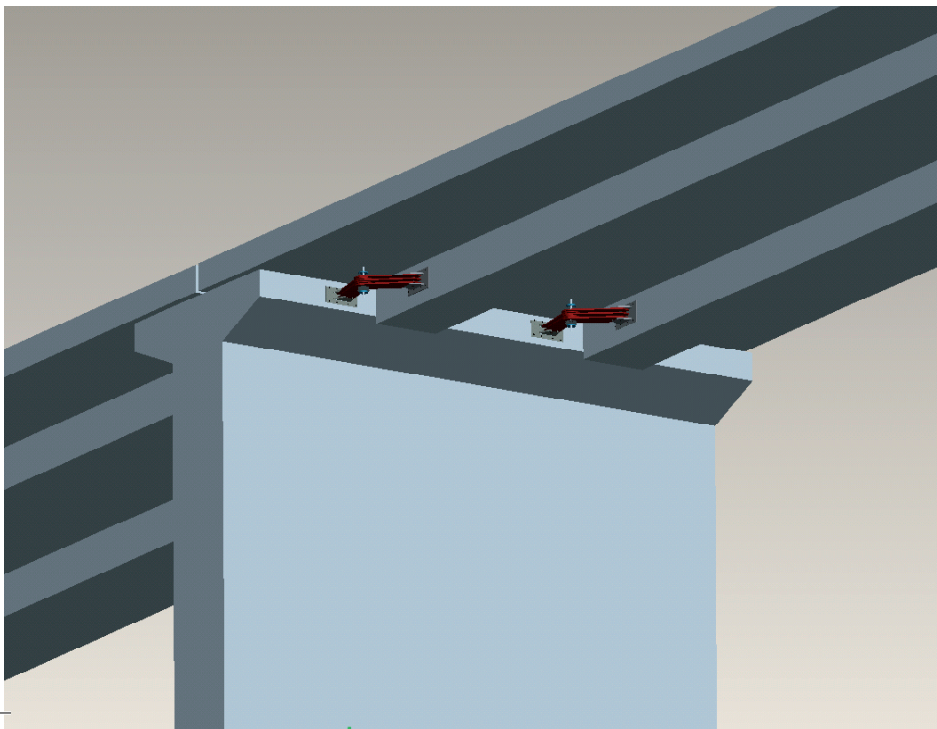
Damptech R&D



Test in Japan



Ready for installation

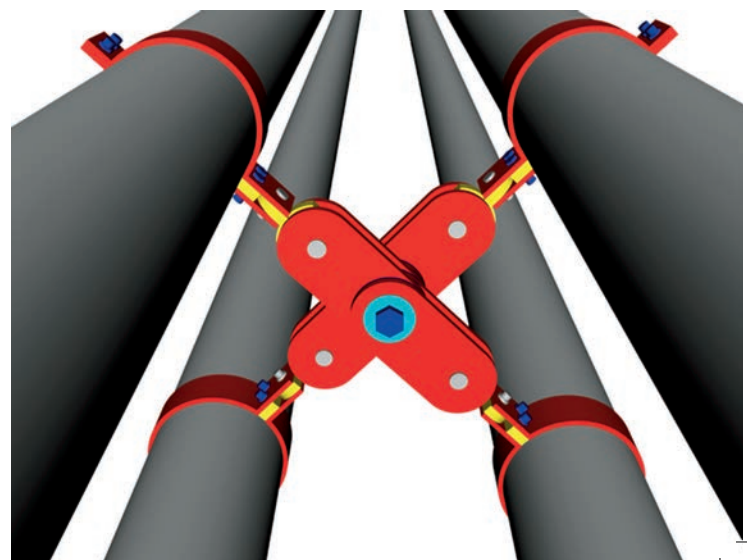
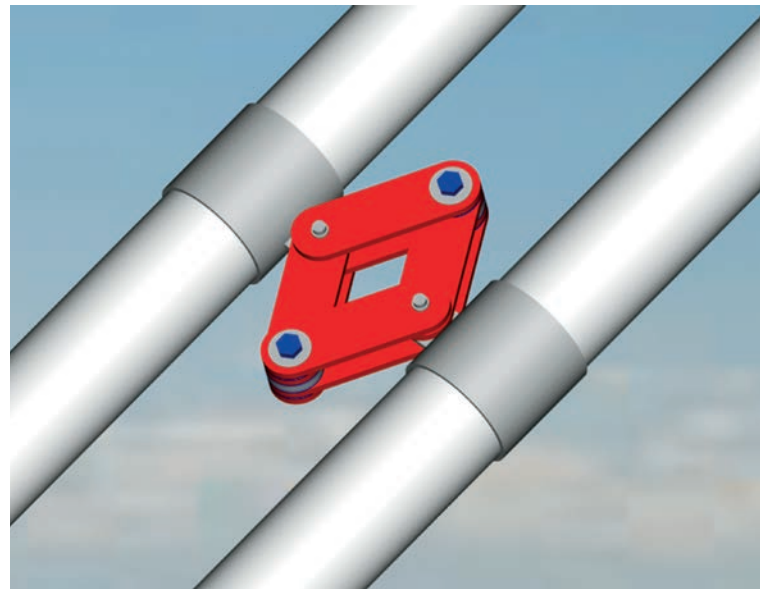
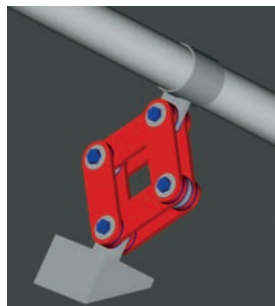
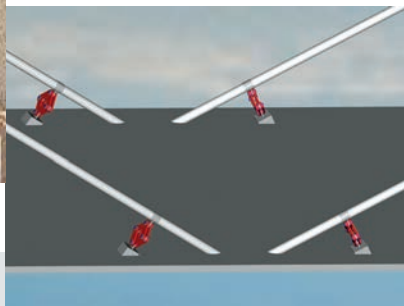
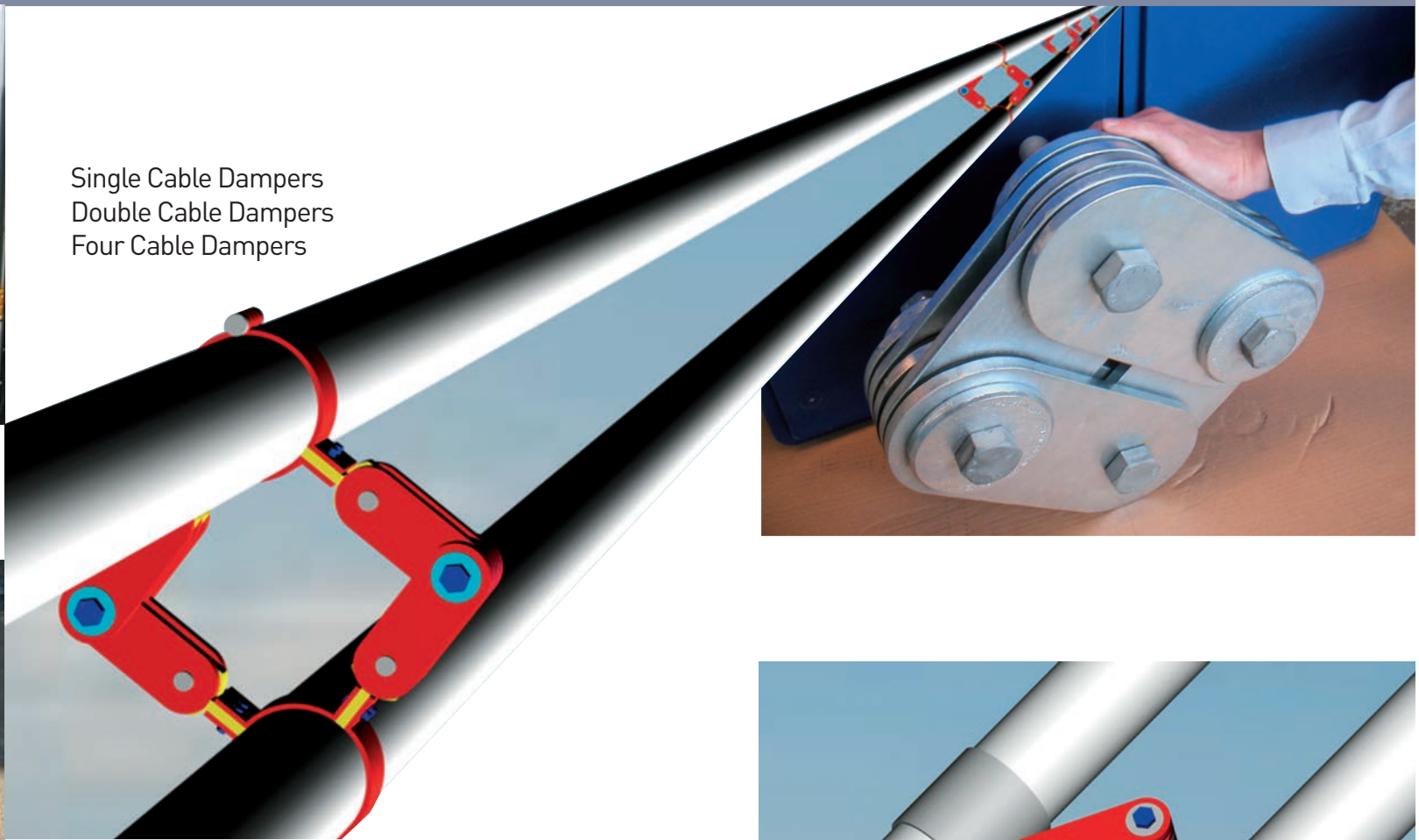


Dampers for bridges and elevated highways

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.

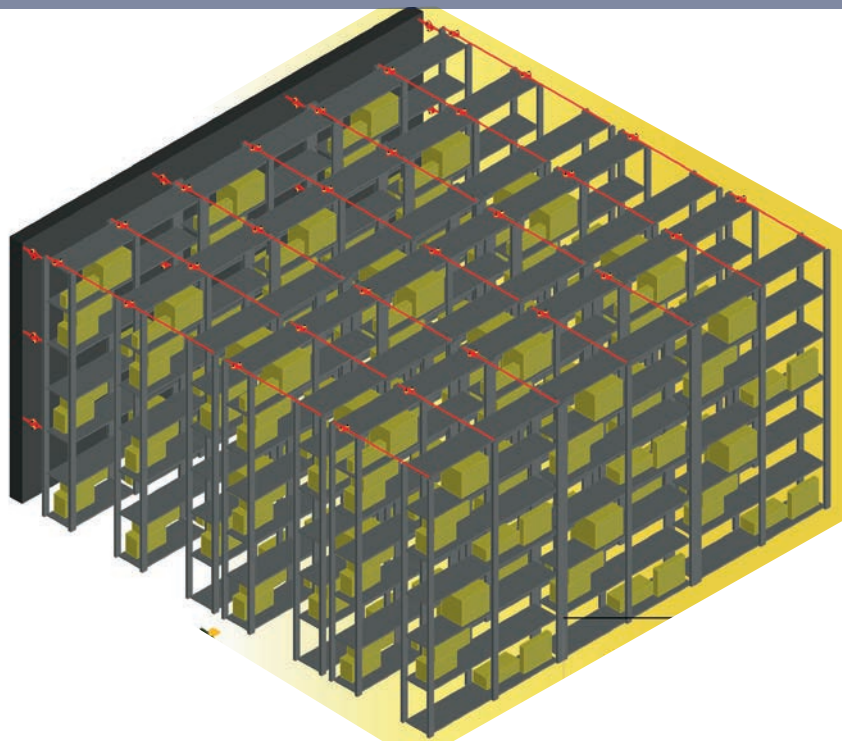
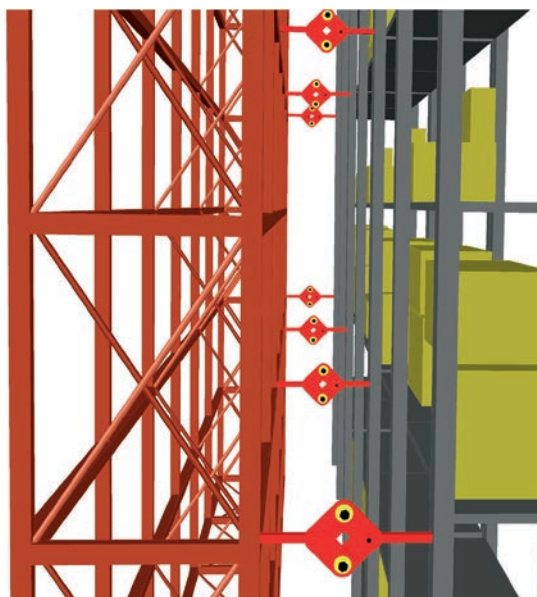
Single Cable Dampers
Double Cable Dampers
Four Cable Dampers



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

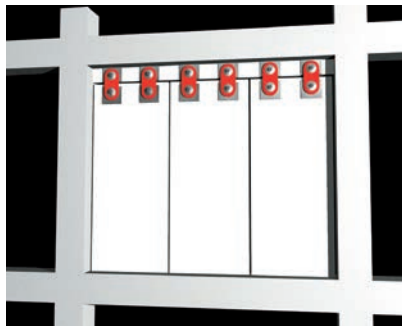


Protection of furniture at offices and homes

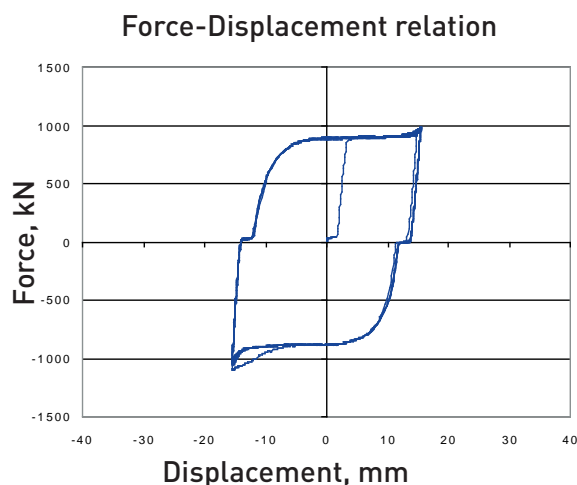


Precast Concrete Structures

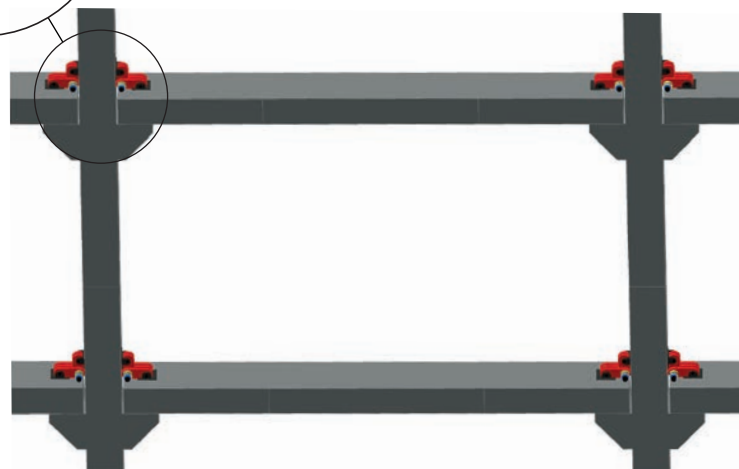
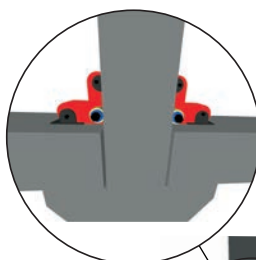
Joints of precast concrete structure often suffer successive dynamic loads. Using dampers can improve and strengthen these joints and their performance.



Increasing stiffness and damping



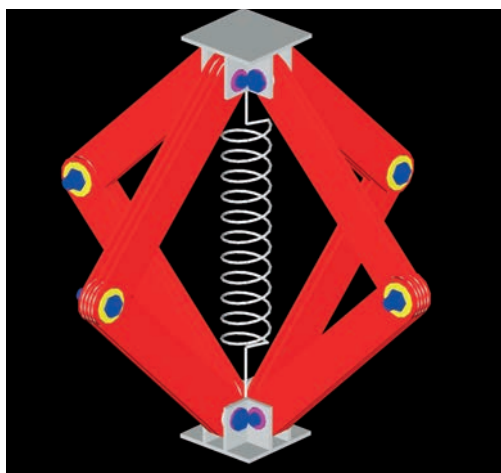
Damptech R&D Center.
5000 kN machine capacity



Damptech production

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.



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