DAMPERS FOR EARTHQUAKE PROTECTION AND VIBRATION CONTROL

- Buildings;
- Structures;
- Bridges;
- Equipment.

REFERENCES
WORLDWIDE EXPERIENCE SINCE 2000
BRACING SUPERSTRUCTURE

HOSPITAL WITH 800 BEDS
• 17 floors;
• Damper capacity: 300 – 500 kN;
• Total number: 348 dampers.

RETROFITTING OF BANK AND OFFICE BUILDING
• 20 floors;
• Damper capacity: 160 – 400 kN;
• Total number: 180 dampers.

TORRE CAPITAL BUILDING
• 24 floors;
• Damper capacity: 800 – 1100 kN;
• Total number: 20 double story braces.
BRACING SUPERSTRUCTURE

JAPAN – ABENO HARUKAS – TALLEST BUILDING IN JAPAN
- 62 floors, 300 meters tall;
- Damper capacity: 1500 – 5000 kN;
- Total number: 108 dampers.

OFFICE BUILDING
- 33 floors;
- Damper capacity: 400 – 800 kN;
- Total number: 170 dampers.
FRICTION BASED STRUT

CALIFORNIA BANK
- 22 floors, 95 meters tall;
- Damper capacity: 1500 kN;
- Displacement: +/- 245 mm;
- Total number: 8 large dampers with struts.
TOGGLE BRACING, CONCRETE SHEAR WALL RETROFIT

SCHOOL BUILDING RETROFIT
(LOW-RISE CONCRETE SHEAR-WALL)
- First and second project in a program to retrofit schools and offices in South Korea;
- 4 floors;
- Damper capacity: 300 kN;
- Total number: 20 dampers.

INDUSTRIAL APPLICATIONS

CEMENT PLANT IN GREECE
- Heavy duty dampers;
- Robust performance in corrosive environment;
- Damper capacity: 250 kN, +/- 400 mm.
BASE ISOLATED BUILDINGS

SUPPLEMENTARY DAMPING FOR RUBBER BEARING BASE ISOLATION

- 7 projects were done in Japan;
- Dampers were installed to protect high-rise buildings as well as laboratories and their equipment;
- Displacement: +/- 600 mm;
- Capacity: 150 kN.
MOMENT FRAME STRENGTHENING

OFFICE BUILDING IN JAPAN
- Damper capacity: 70 kN (up to 500 kN feasible);
- Total number Units: 24.

QUALITY CONTROL AND PRODUCTION MA-
- Automated assembly and testing machine is used to assure the quality and capacity of each damper.
ADVANTAGES OF DAMPTECH DAMPERS:

- Reliable performance over lifetime of structure;
- Effective damping of up to 50%;
- Standard capacities vary from 200 to 2000 kN;
- Large capacity is up to 10 MN;
- High flexibility on stroke;
- Large displacements of +/-1500 mm are available for base isolation;
- Ideal for retrofitting;
- Lower strength requirements;
- Easy installation;
- Worldwide patents and 20 years of experience