



## SEISMIC DAMPERS FOR BRIDGE APPLICATIONS BY TAYLOR DEVICES

### Industry Leading Shock and Vibration Protection

Originally developed for military and aerospace applications in the 1960's, Taylor Fluid Viscous Dampers are now used by structural engineers worldwide to protect bridges and the people who rely upon them to have a functional structure/lifeline after an earthquake.

- Taylor Devices is the world leader in providing dampers to control vibrations caused by earthquakes, wind, traffic and pedestrians
- Our dampers have been validated through rigorous research, full scale testing and published work by highly reputable organizations
- Proprietary dry-running seals have been qualified and tested for millions of cycles and are manufactured only by Taylor Devices
- High strength, mirror polished, stainless steel piston rods and 3 part heavy-duty paint system on external components
- Damper output force is proportional to velocity,  $\text{Force} = CV$  ; between 0.2 and 2.0; unlimited C values available for optimal structural performance
- Long stroke bridge dampers have a heavy-wall steel guide sleeve
- Identical quality standards for all our products whether they are used for spaceflight, military equipment, buildings or bridges
- Our policy is to test every single bridge damper we produce to maximum output requirements
- Taylor dampers are designed and tested in output force ratings up to 2 million pounds (8900 kN) and amplitudes up to +/-42 inches (1.06 m)
- Unequaled ability to provide a damper design that is accurate, controllable, efficient, temperature and frequency independent and maintenance free
- Taylor dampers have unequalled ability to respond to extremely small or very large motions
- The only technology that can reduce stress and deflection simultaneously; damper forces are out-of-phase with structural dynamic forces
- Bridge dampers are available with "Lost Motion Devices or Fuse Elements or Brake Elements" to eliminate the continuous response to small, every-day traffic and wind induced vibrations
- Dampers can also be provided with special stroke limiting devices or end-of-travel bumpers

