DIS 3D Isolation System
Seismic Protection for Applications Requiring Vertical and Horizontal Acceleration Reduction

The Need for 3D Isolation
Seismic isolation is typically only engineered to protect against horizontal accelerations.

In some applications, however, such as a major hydroelectric dam in Canada, extreme vertical accelerations were also present.

During a seismic event, mission critical equipment would be subjected to spectral accelerations up to 17g. These accelerations would damage sensitive equipment, causing dam controls to be inoperable.

Dynamic Isolation Systems developed a system which provides isolation from damaging accelerations in both horizontal (X, Y) and vertical (Z) directions.

DIS 3D isolation systems reduce forces and accelerations to be within IEEE 693 High Performance requirements.

The successful development of 3D isolation allowed the project owner to incorporate vertical isolation systems in a number of additional applications.

Spectral accelerations reduced by factors of 10 to 20.

DIS’ 3D isolation systems are an effective and complete solution for addressing earthquake hazards.

Dynamic Isolation Systems specializes in custom design, development and manufacturing of solutions for unique applications.