

## Seismic Absorbers

### Electrical and I&C Cabinet Protection Against Earthquakes and Shock-Induced Vibrations

Lowering seismic excitation levels of existing and new instrumentation and control (I&C) cabinets to improve plant reliability and ease the qualification process

#### Challenge

In order to successfully qualify new electrical and I&C equipment, the seismic capacity of concerned structures, systems and components has to be validated.

Due to changing regulations, even installed and previously qualified equipment needs to be reassessed to determine if higher seismic demands are met. Since these cabinets were originally designed and qualified for lower seismic demand, costly replacement or extensive structural upgrades may be necessary.

#### Solution

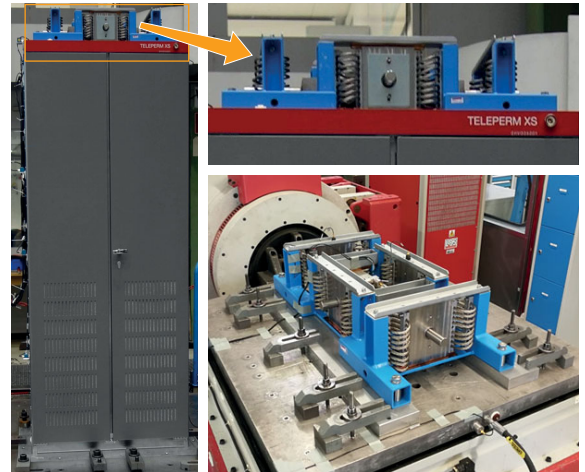
Our seismic absorbers, once installed, effectively reduce the dynamic response of cabinets and cabinet-like equipment.

The system drastically reduces earthquake-generated excitation experienced by the components housed within cabinets. Through careful adjustment of the dampening mechanism, the levels of excitation experienced by the cabinets and components can be reduced below their qualification values. This ensures the integrity and operability of sensitive equipment, even in the event of strongly increased seismic activity.

#### Customer benefits

- Increases reliability of plant equipment by decreasing the chance of damage during seismic activities
- Costly requalification is not required
- The cabinet does not need structural reinforcement and the inner components do not need to be replaced

**Your performance**  
is **our** everyday **commitment**



Seismic absorber system with close-up and on the characterization test bench

#### Technical information

- System tuned to reduce the response in both horizontal directions simultaneously
- Easily fixed on the cabinet top through bolted connections; this does not require any heavy work
- Adaptable to any kind of cabinet by only changing the support and bolted connections design

#### Key figures

Up to **50%** reduction of maximum accelerations within the cabinet

Factor **2-3** reduction of the in-cabinet response spectra peak

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