

# Ministry of Economy (Mexico)



## Project description

The Mexican Ministry of Economy's Executive Tower in Mexico City, a 27-storey building dating from 1976, was constructed to a seismic protection standard that no longer applies.

In order to strengthen the building, and ensure that it will continue to survive earthquakes of the type that strike Mexico city from time to time, it was decided to install an array of shock absorbers (viscous dampers), complete with steel bracing, in each face of the building.

## mageba scope

mageba RESTON®SA shock absorbers were selected for use.

With a pair of these dampers per face at each of 25 levels, each damper in a pair acting in a different direction, the total number of dampers required was 200.

These were designed for loads of up to 800 kN and seismic displacements of +/- 50 mm.

The manufacturing process involved a high degree of complexity, considering in particular the very low alpha-value of 0.1 (far more demanding to achieve than typical values of about 0.3).

To provide complete confidence in the actual seismic performance of the dampers, full-scale, full-speed testing was carried out, simulating exactly what would happen in an earthquake.

## Highlights & facts

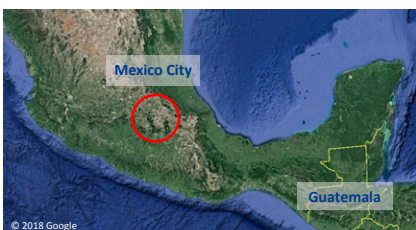
### mageba Products:

Type:	RESTON®SA shock absorbers
Features:	Very low alpha-value of 0.1
Installed:	2017

### Structure:

City:	Mexico City
Country:	Mexico
Built:	1976
Type:	Office building
Owner:	Secretaría de Economía
Contractor:	Grupo Copris

The building is located in Colonia Hipodromo Condesa in Mexico City, Mexico



Labelling of viscous dampers at mageba's Shanghai factory following fabrication



View of one section of retrofitted bracing, with two RESTON®SA shock absorbers

