

# Pedernales Hospital (Ecuador)



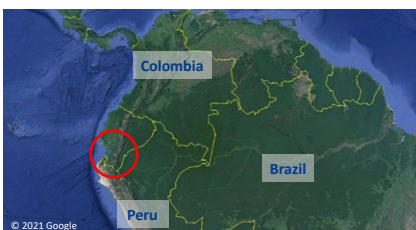
## Project description

The general hospital of the city of Pedernales in western Ecuador, destroyed during the large earthquake in April 2016, required to be rebuilt with two major priorities: the reconstruction should be as quick as possible to enable it to resume serving the local population, and the new building should be able to withstand any similar seismic events in the future.

The new Pedernales Hospital has been built with 30 beds and provides a range of services.

Following the successful completion of projects to supply seismic isolation bearings for the reconstruction of three hospitals in western Ecuador, mageba was awarded the contract to supply bearings for this hospital as well.

The hospital is situated in the coastal town of Pedernales



## mageba scope

In total 99 RESTON®PENDULUM DUPLO bearings were supplied, each with two curved sliding surfaces. Two further units were fabricated for prototype testing, which was conducted at Sismalab in Italy, to verify seismic performance in advance of use.

The isolators are able to accommodate movements of +/- 400 mm when a major earthquake occurs and each pendulum isolator can withstand a vertical load of 1,500 kN.

Following their fabrication in mageba's Shanghai factory, they were shipped to site and installed under mageba supervision.

The interface between the isolator and the structure is through anchor plates, which facilitates maintenance or replacement if needed. The lower anchor plate is fixed to concrete and the upper plate is welded directly to steel of the building superstructure.

RESTON®PENDULUM seismic isolators ready for transport



## Highlights & Facts

### mageba Products:

Type: RESTON®PENDULUM  
DUPLO bearings  
Installation: 2021

### Structure:

City: Pedernales  
Country: Ecuador  
Type: Hospital  
Owner: Ministry of Public Health of Ecuador  
Contractor: CHINA CAMC  
ENGINEERING CO., LTD.  
Designer: Sísmica Ingenieros  
Consultores Cia, Ltda.

A RESTON®PENDULUM isolator bearing in its final position

