

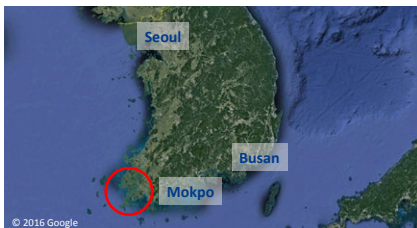
New Millenium Bridge (South Korea)



Project description

The New Millenium Bridge construction project in the southwest region of Korea will link Amtae island to Aphae island. This symbolic bridge is also called 1004 Diamond Bridge as its main design purpose is to demonstrate an entrance to a prismatic diamond shaped group of 1,004 islands. Moreover, the bridge was specially designed for the Sin-ahn District to re-illuminate leading bridge design in South Korea. The bridge is featured as FCM (Free Cantilever Method) anchored hybrid two-pylon cable-stayed bridge consisting of its high (195 m) and low (135 m) pylon with two bundle cables in the back span and the pre-construction of the side span method during erection is considered to improve the aerodynamic stability.

The bridge connects the two islands Amtae and Aphae of the Jeollanam-do province



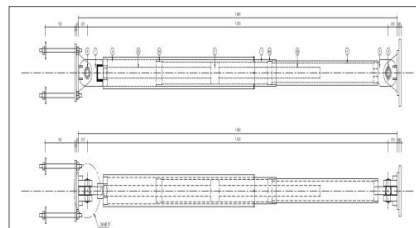
mageba scope

mageba will be supplying four RESTON®SA hydraulic dampers that will be installed in one of the pylons.

The devices, with a maximum load capacity of 1,500 kN and a movement capacity of $\pm 1,200$ mm, feature a pressure release valve in order to prevent overload in case of a seismic event. Moreover, the dampers were specially designed to fit in a limited, predefined space, hence proving mageba's innovative approach and competence in the field of seismic protection systems.

In addition to the hydraulic dampers, mageba also supplied eight sets of brackets and bolts.

Drawing of a RESTON®SA hydraulic damper



Highlights & facts

mageba products:

Type: RESTON®SA hydraulic dampers
Installation: 2017

Structure:

City: Shinan-gun, Jeollanam-do
Country: South Korea
Type: Multi-span suspension bridge
Construction: 2010–2018
Length: 10.8 km
Owner: Iksan Regional Construction and Management Administration
Contractor: Daelim E&C
Architect: Dasan Consultants

Illustration of reduction of acceleration by additional damping

