

# Atlantic Bridge (Panama)



## Project description

The world's busiest waterway – the Panama Canal – has been widened and deepened to allow for a second lane of traffic for larger container ships, the new "Panamax ships".

Within the expansion project of this key conduit for international maritime trade, a new bridge was constructed on the Atlantic side of the canal, called the Atlantic Bridge.

The new third crossing across the canal is located just 1.8 miles (3 km) from the Gatun Locks in Colón. It spans 579 yards (530 m) and has a clearance of 82 yards (75 m) to allow the largest container ships in the world to navigate beneath, connecting the Pacific with the Atlantic Ocean through this man-made 48 mile (77 km) waterway.

## mageba scope

For this project mageba delivered 16 RESTON®SPHERICAL bearings that feature uplift claws and designed according to AASHTO standards. Additionally, 4 LASTO®BLOCK lateral tower bearings for the tower level were also supplied.

All bearings face very large displacements up to +/-40 inches (+/-1,025 mm) as the bridge is seismically isolated. As a result, all bearings use mageba's patented ROBO®SLIDE sliding material.

ULS uplift loads are being resisted with mageba's uplift claws designed for two piers that feature an innovative external uplift device solution resisting loads up to 3,500 kN (ULS).

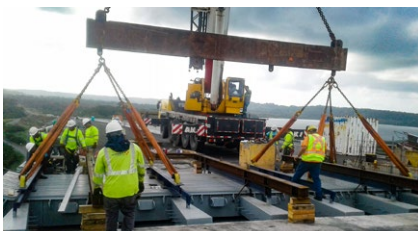
In addition, TENSA®MODULAR expansion joints of types LR2, LR3, LR4, LR5, LR6 and LR20 were supplied along with the bearings. The LR20 joints are now the largest modular joints made by mageba in the Americas.

## Highlights & Facts

### mageba products:

Type:	RESTON®SPHERICAL spherical bearings LASTO®BLOCK elastomeric bearings TENSA®MODULAR joints
Features:	ROBO®SLIDE high-grade sliding material according to AASHTO
Installation:	2016–2019
<b>Structure:</b>	
City:	Colón
Country:	Panama
Type:	Cable-stayed concrete bridge
Completed:	2019
Owner:	Autoridad Del Canal de Panamá (ACP)
Contractor:	VINCI Construction

LR20 modular joint being installed on site. Four joints of 10.4 m each were supplied for this project



Lateral bearing with ROBO®SLIDE and adjustable shim plates to be installed between the tower and the deck



Spherical bearing being tested according to AASHTO

