

Bayonne Bridge (New York)



Project description

The Bayonne Bridge connects the City of Bayonne, NJ with Staten Island, NY. After its completion in 1931, the Bayonne Bridge was the longest steel arch bridge in the world, but today it sits in fifth place.

In 2013, prompted by the expansion of the Panama Canal, a \$743.3 million project was awarded to raise the bridge deck within the original steel arch in order to accommodate larger post-Panamax class ships.

The significance of this project cannot be overvalued as fully 12% of all US-bound international container ships currently pass under the Bayonne Bridge.

mageba scope

To support the newly raised deck, mageba is supplying 158 RESTON®DISC bearings. All of the approach span bearings are being specially fabricated with the capability to be temporarily locked against longitudinal movements during the construction phase, but allowing free movement after construction is completed.

The new bridge deck will also be equipped with 18 TENSA®MODULAR expansion joints, designed with up to 6 gaps to accommodate 17.7 in (450 mm) of movement, and 4 TENSA®FINGER sliding finger joints to accommodate 31.5 in (800 mm) of movement. Additionally, mageba is supplying sliding plate expansion joints for the shared use pedestrian and cycle paths.

Highlights & Facts

mageba products:

Type: TENSA®MODULAR LR expansion joints, TENSA®FINGER GF sliding finger joints, RESTON®DISC bearings

Features: Uplift Bearings

Installation: 2015–2017

Structure:

City: Staten Island, NY

Country: USA

Type: Steel arch

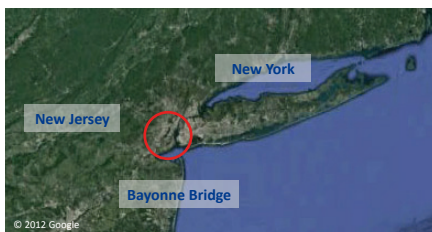
Completed: 1931

Length: 5,780 ft (1,762 m)

Contractor: Skanska Koch-Kiewit JV

Owner: Port Authority of NY and NJ

The bridge is one of three that connect Staten Island, New York to New Jersey



A finished Disc bearing before delivery



Deck movements will be facilitated by modular joints (as shown) and sliding finger joints

