Verrazano Narrows Bridge (USA)



Project description

The Verrazano Narrows, a body of water which separates the New York boroughs of Brooklyn and Staten Island to the south of Manhattan, is the gateway to New York City's harbor. The bridge that spans the Narrows creates a vital connection for road traffic, carrying about 200,000 vehicles per day.

The double-decked suspension bridge has a central span of 4,260 feet (1,298 m), and was the longest suspension bridge in the world from the time its upper level opened in 1964 until 1981. Currently, it has the longest bridge span in the Americas.

Delivered products

The bridge's existing finger joints, each accommodating enormous deck movements of 2,700 mm (approx. 9 ft) are to be replaced with new finger joints. Due to the great length of the individual fingers, they will receive intermediate support at midspan. The challenge of designing and supplying these exceptional joints is increased by the need to tailor them to precisely match existing geometry and conditions.

Various single gap joints, also tailored to suit the existing structure, are also being supplied to accommodate much smaller movements at other locations.

Highlights & Facts

mageba products:

Type: Sliding finger joints Features: Enormous movements

Installed: 2015

Bridge:

City: New York Country: USA

Construction: Suspension bridge Type: Road bridge Built: 1959–1969

Length: 4,260 feet (1,298 m) Owner: City of New York

The bridge spans the Verrazano Narrows - the gateway to New York City's harbor



The bridge's sliding finger joints, designed for enormous movements, must be replaced



3D view of a new sliding finger joint, facilitating longitudinal movements of 2,700 mm



