

Sudarshan Setu Bridge (India)



Project description

The Sudarshan Setu Bridge on India's west coast, newly connecting the holy island of Beyt Dwarka to the mainland for two million pilgrims each year, is India's longest cable-stayed structure.

Before this iconic structure was inaugurated by Indian Prime Minister Narendra Modi on 25th February 2024, the millions of pilgrims that visited the Krishna temples on Beyt Dwarka island had to make the crossing from the mainland by boat.

Thankfully, their pilgrimage is now somewhat easier, with a four-lane road bridge connecting the island to the mainland for the first time.

The bridge has a total length of 2,320 m, with a cable-stayed structure of length 900 m – India's longest. It also has the country's longest individual cable-stayed span, with a length of 500 m.

mageba scope

The cable-supported structure and the approaches at both ends are supported by mageba bearings including 116 RESTON®POT bearings, designed to support vertical loads of up to 22,000 kN and resist horizontal forces of up to 8,500 kN, and eight LASTO®BLOCK elastomeric bearings arranged in four pairs, with each pair designed to carry a vertical load of 17,000 kN and resist horizontal forces of 3,300 kN.

The required expansion joints were also manufactured by mageba and included two TENSA®MODULAR LR6 expansion joints (each of length 26.5m, and 28) and TENSA®GRIP RS-B80 single-gap expansion joints of the same length.

Highlights & facts

mageba Products:

Type: RESTON®POT bearings

LASTO®BLOCK elastomeric bearings TENSA®MODULAR LR

joints

TENSA®GRIP RS-B80 ioints

Joints

Installation: 2023

Structure:

Region: Beyt Dwarka

Country: India

Type: Cable-stayed bridge

Length: 2,320 m

Owner: Ministry of Road

Transport & Highways, Government of India

Contractor: S.P. Singla Constructions

Pvt. Ltd.

Designer: Wiecon Civil & Structural

Consulting Engineers and ASC Infratech Pvt. Ltd.

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Lifting a TENSA® MODULAR expansion joint into nosition



Installation of a TENSA® MODULAR joint on the Sudarshan Setu Bridge

