

# Mumbai Trans Harbour Link (India)



## Project description

The island city of Mumbai on India's west coast relies heavily on sea bridges to connect various parts of the city to each other and to the mainland, such as the Mumbai Trans Harbour Link.

When the construction is completed in 2023, the Mumbai Trans Harbour Link (MTHL) will be India's longest sea bridge, with a length of 21.8 km.

It will connect the island city of Mumbai with the district of Navi Mumbai, across the sea inlet that separates them.

## mageba scope

For the main crossing of the bridge, which has a length of 7.8 km, a large number of bearings were required to support the superstructure on its many piers.

Following detailed consultations, the use of RESTON®SPHERICAL bearings was agreed upon. Over 400 of these bearings were supplied and designed for vertical loads of up to 30,990 kN, horizontal forces of up to 9,720 kN and in some cases, uplift forces of 1,250 kN. Where required by the bridge's design, the bearings were also supplied with the ability to accommodate sliding movements of 250 mm.

In addition to the bearings, mageba will also supply TENSA®MODULAR expansion joints of types LR5, LR6, LR7 and LR8 for the project.

Further special features include the design of concrete-free connections to steel structures and the protection against destruction in the event of an earthquake.

## Highlights & facts

### mageba Products:

Type: RESTON®SPHERICAL bearings  
TENSA®MODULAR LR joints

Installation: 2020–2021

### Structure:

City: Mumbai

Country: India

Completed: 2023

Length: 21.8 km

Owner: Mumbai Metropolitan Region Development Authority

Contractor: Larsen & Toubro Construction Ltd, Daewoo - Tata Projects Limited JV

Designer: COWI, WS Atkins India Pvt. Ltd., Ramboll India Pvt. Ltd

The new bridge is located in Mumbai, India



A RESTON®SPHERICAL bearing with uplift resistance after being lifted into position on site



Installation of one of the RESTON®SPHERICAL bearings

