Ganga Rail-Road Bridge, Patna (India)



Project description

A new bridge is currently being built over the River Ganga (or Ganges) near the city of Patna in north-eastern India. The river is of enormous importance to the people who live in the substantial part of India through which it flows, but its exceptional width presents a great obstacle to transportation and commerce.

The main bridge, with a length of 4,556 m and spans of 123 m, will carry both rail and road traffic on separate levels. The total length of structure being constructed as part of the overall project, including approaches, is approximately 20 km.

mageba scope

Mageba supplied a large number of bearings and expansion joints for the main bridge and its approach structures.

The bearings included 464 RESTON®POT bearings for loads of up to 18,000 kN, and RESTON®FORCE guide bearings designed to resist horizontal forces of up to 5,400 kN but carry no vertical loads. Temporary erection bearings were also supplied.

The expansion joints included 37 TENSA®MODULAR expansion joints of type LR2 for the road deck of the main structure, and 216 metres of TENSA®GRIP single gap joint for the approach structures.

Highlights & facts

mageba products:

Type: RESTON®FORCE and

RESTON®POT bearings, TENSA®MODULAR (LR2) and TENSA®GRIP joints

Installation: 2007-2014

Structure:

City: Patna Country: India Completed: 2015

Type: K-truss bridge Length: 4.56 km

Contractor: Ircon International Ltd.
Owner: East Central Railway

The bridge crosses the River Ganges near the city of Patna in north-eastern India



A RESTON®POT bearing with capacity of 18,000 kN as fabricated and ready for delivery to site.



A RESTON® FORCE bearing, designed to resist only transverse horizontal forces



