# Chenab Railway Bridge (India)



### **Project description**

When completed in 2018, the Chenab Railway Bridge will become the world's highest railway bridge, with a height of 359 metres. Crossing the River Chenab, it will enable the Indian mainland to be connected by rail with the state of Jammu & Kashmir for the first time. The 17-span bridge will have a length of 1315 m, including a trussed arch main span of length 469 m. The arch is being constructed with the help of two selfpropelled auxiliary cable cranes, moving along cables spanning between 100m-high temporary pylons at each side of the valley. The steel box chords of the trusses will be filled with concrete to help resist wind forces and save internal painting.

### mageba scope

magebaissupplying 22 RESTON® SPHERICAL bearings & 38 LASTO® BLOCK elastomeric stopper bearings for the construction of this remarkable bridge. All of the spherical bearings are of type KA (free-sliding), meaning that they allow sliding movements in all horizontal directions. They are designed to carry vertical loads of up to 14,160 kN, and 12 of the bearings are also designed to resist uplift forces. LASTO® BLOCK elastomeric stopper bearings with PTFE have been designed for horizontal force up to 5,100 kN.

## **Highlights & facts**

### mageba products:

Type: 22 RESTON®SPHERICAL bearings (type KA),

38 LASTO®BLOCK elastomeric stopper bearings

Features: Uplift resistance spherical and elastomeric stopper

with PTFE

Installation: 2014-2017

Structure:

State: Jammu & Kashmir

Country: India
Completed: 2018
Type: Arch bridge
Length: 1,315 m

Contractor: Afcons Infrastructure Owner: Northern Railways

The bridge is located in northern India, in the state of Jammu & Kashmir.



Illustration of a RESTON®SPHERICAL Type KA bearing – exploded view showing central calotte.



A typical RESTON®SPHERICAL bearing during application of grease to upper sliding surface.



