

Rishikesh – Karnaprayag Railway Line (India)



Project description

In the foothills of the Himalayas in northern India, a railway line is being constructed, which will vastly improve access to the mountainous region near the border with Tibet.

The ongoing project in India's northern state of Uttarakhand will run from the city of Rishikesh to the town of Karnaprayag, and will reduce the travel time along the 125-kilometer route from 6.5 to 2.5 hours, thanks to the 17 tunnels and 35 bridges along the way which make up an astonishing 85% of the distance. It will thus greatly improve access to the whole border region, and in particular to Badrinath Temple, one of India's sacred Char Dham pilgrimage sites.

The project is expected to be completed by 2025.

The Rishikesh – Karnaprayag Railway Line is situated in India's northern state of Uttarakhand



mageba scope

To support the superstructures of a number of the bridges along the route, while accommodating their movements and rotations, mageba has supplied a large quantity of bearings, including 210 RESTON®SPHERICAL bearings, designed for vertical loads of up to 14,510 kN and horizontal forces of up to 5,350 kN; 16 RESTON®CYLINDER bearings, designed to support vertical loads of 23,000 kN and uplift forces of 950 kN; 8 RESTON®FORCE horizontal force bearings (of both the fixed and guided-sliding types), to resist horizontal forces of 23,800 kN; 92 RESTON®POT bearings, designed for vertical loads of up to 12,760 kN and horizontal forces of up to 3,500 kN; 50 LASTO®HDRB high damping rubber bearing with load capacities of up to 1,783 kN, designed to also resist uplift forces of up to 50 kN and finally 48 LASTO®BLOCK elastomeric bearings.

In addition, to these products 80 m of TENSA®FINGER RSFD expansion joint for movements of ± 40 mm has been also delivered.

Some of the LASTO®HDRB high damping rubber bearings as designed and fabricated for the rail link



Highlights & facts

mageba Products:

Type: RESTON®CYLINDER with uplift attachments, RESTON®SPHERICAL, RESTON®FORCE and RESTON®POT bearings
LASTO®HDRB high damping rubber bearings with uplift attachments
LASTO®BLOCK elastomeric bearings
TENSA®FINGER RSFD joints

Installation: 2022

Structure:

City: Rishikesh and Karnaprayag
Country: India
Structure: Railway bridges
Owner: Rail Vikas Nigam Limited
Contractor: Rahee Infratech Limited, GPT Infraprojects Limited
Designer: L&T IEL, AECOM, Luis Berger, aarvee associates

A RESTON®FORCE horizontal force bearing of the fixed type after manufacturing

