

# Rhineland Route (Holland)



## **Project description**

The Rhineland Route project is a major transportation project in a part of Holland through which the Rhine river flows on its way towards Rotterdam, and involves the construction of an expressway connecting the cities of Katwijk (via the A44 motorway) and Leiden (on the A4).

The project also includes the rebuilding of a motorway junction at Leiden West, the construction of a new 4-km road that includes a 2.2 km long tunnel, the widening of 12 km motorway, and making necessary adjustments on the A4 and A44.

## mageba scope

For the bridges of the project, mageba designed and manufactured a wide range of bridge bearings and expansion joints:

- 382 LASTO®BLOCK bearings of types B and NBa, designed for loads of up to 1.946 kN
- 18 RESTON®SPHERICAL bearings of various types and designs, including guidedsliding bearings designed for 38,600 kN vertical load, 1,500 kN transverse load and +/- 121 mm movement
- 4 RESTON®FORCE horizontal force bearings, designed for transverse forces of 1,035 kN and movements of +/- 148 mm
- 2 TENSA®GRIP RS single-gap expansion joints with a total length of 60 m and 15 RS-LS joint with noise reducing surfacing and a total length of 335 m
- 4 TENSA®FINGER RSFD cantilever finger expansion joints, with a total length of 70 m, designed to accommodate movements between 200-320 mm

**Highlights & facts** 

#### mageba products:

Type: LASTO®BLOCK

B and nBA beaings RESTON®SPHERICAL

bearings RESTON®FORCE bearings

TENSA®GRIP RS and RS-LS joints

TENSA®FINGER RSFD

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Installation: 2019-2020

#### Structure:

City: Katwijk and Leiden

Country: Netherlands

Built: 2020

Provincie Zuid-Holland Owner:

Contractor: Comol5 wUrck Designer:

The project is located in South Holland



A LASTO®BLOCK bearing of type NBa with shear disc connection to the lower anchor plate



A TENSA®FINGER RSFD cantilever finger expansion joint during installation on site

