

MKAD - Profsoyuznaya Int. (Russia)



Project description

The MKAD (Moscow Ring Road) Street (converting into A-130 highway heading towards Kaluga) is a part of the strategic upgrade of Moscow Infrastructure by the government of Moscow City.

Finished in 2017, this interchange upgrade saw widening of the Kaluga Highway to 4 lanes, reconstruction of MKAD KM39-KM42, 1 tunnel (970 m), 2 turning and 2 through-put new overpasses.

The construction works took place in confined conditions, with several stages of traffic re-routing, in under 2 years.

Overpass superstructures were assembled in-place on-site, and transfer the loads through quite compact spherical bearings into slender columns.

This project forms another important transport knot for modern Moscow infrastructure.

mageba scope

Early in the project mageba teamed up with the designer of the turning overpass sections, and made timely and optimised design of spherical bearings RESTON®SPHERICAL, including 1 bearing with uplift claws - forces induced by the special geometry of the overpass.

Expansion joints - in order to follow the decree of the Mayor of Moscow to provide low-noise expansion joints for urban areas - were chosen to be the TENSA®GRIP RS-LS with sinus plates. In addition to that, asphalt-strengthening ribs ROBO®DUR were also used to strengthen the asphalt in the joint area and provide durable, comfortable driving experience for all drivers to go through the newly built structures.

Highlights & facts

mageba products:

Product: RESTON®SPHERICAL

bearings (incl. uplift); TENSA® GRIP RS-LS100 expansion joints with sinus plates; ROBO® DUR asphalt strengthening ribs

Feature: Bearings with uplift,

noise-reducing joints and strengthened asphalt

Installation: 2017

Structure:

Location: Moscow
Country: Russia
Type: Overpasses
Main span: 77 m
Length: 305 m
Completion: 2017

Owner: Moscow City

Contractor: ARKS

Engineer: MosEngProekt/KSP/MTM

A strategic new interchange on the crossing of Moscow Ring Road and Profsoyuznaya Str. - exit towards Kaluga



RESTON®SPHERICAL bearings support the horseshoe-shaped turning overpass



TENSA®GRIP RS-LS sinus-plated joints lower noise emissions, approaches strengthened by ROBO®DUR asphalt ribs

