Viaducto Puerto de Santa Maria (Spain)



Project description

The town of El Puerto de Santa Maria on Spain's south coast is served by a new highway viaduct connecting to the region's A-4 and A-491 highways. The viaduct has a total length of 440 m, with 14 spans of approximately 30 m each. The deck's "fixed point" is at its mid-length, so the greatest movements experienced by the deck are at its abutments. The viaduct has a prominent horizontal curve at its centre, resulting in the need to facilitate transverse movements at each pier as the deck expands and contracts due to thermal effects.

mageba scope

In consultation with mageba, the bearings and expansion joints to be used on the structure were selected to optimise performance at each location. Rather than limiting the solution to a single type of product in each case, two types of bearing (spherical and elastomeric), and two types of expansion joint (modular and finger) were selected for use on the same structure – a rather uncommon degree of variety. With LASTO®BLOCK and RESTON®SPHERICAL bearings, and TENSA®MODULAR LR and TENSA®FLEX RC expansion joints, the structure demonstrates well the diversity of mageba's product range.

Highlights & facts

mageba products:

Types: RESTON®SPHERICAL,

LASTO®BLOCK, TENSA®MODULAR LR, TENSA®FLEX RC

Installation: 2010

Structure:

City: Puerto de Santa Maria

Country: Spain Completed: 2011

Type: R.C. highway viaduct

Length: 440 m Contractor: AZVI SA

El Puerto de Santa Maria is located in southern Spain, west of Gibraltar



The structure features TENSA®FLEX RC (shown) and TENSA®MODULAR LR expansion joints



LASTO®BLOCK bearings are used at the piers, and RESTON®SPHERICAL bearings at the abutments



