Queen Elizabeth II Bridge (UK)



Project description

The Queen Elizabeth II Bridge is part of the Dartford-Thurrock River Crossing, a major road crossing of the River Thames close to London. The crossing forms part of London's M25 orbital motorway, which almost encircles the city. The bridge was built between 1988 and 1991 to carry all M25 traffic in one direction across the river, enabling both of the existing tunnels to be dedicated to traffic in the other direction. The cable stayed bridge has an average daily use of over 130,000 vehicles. When it opened in 1991, its 450-metre main span was the longest cable-stayed span of any bridge in Europe.

mageba scope

To support the decks of the main cable stayed structure and the approach viaducts on both sides, which together have a length of 2812 m, mageba supplied 219 RESTON®POT bearings with vertical load capacities of up to 8150 kN. The RESTON®POT bearing has been one of mageba's most widely used products over a period of several decades, having proven its value on countless structures all around the world. With a high-quality elastomeric pad at it centre, within the bearing's pot and supporting its piston, it can accommodate significant rotations about any axis.

Highlights & facts

mageba products:

Type: RESTON®POT bearings

Installation: 1990

Structure:

City: London Country: UK Completed: 1991

Type: Cable stayed bridge

Length: 2812 m Main span: 450 m

Function: Motorway bridge Crosses: Thames River Contractor: Cleveland Bridge

The bridge crosses the River Thames, forming part of London's M25 orbital motorway.



Illustration (exploded view) of a RESTON®POT bearing of the guided sliding type.



POM seal on the bearing's elastomeric pad – one of the secrets of RESTON®POT's success.



