

Uddevalla Bridge (Sweden)



Project description

Originally, the route E6 went through the city of Uddevalla in central Sweden. But increasing traffic demands and associated delays and congestion instigated the planning of a 1'712 meter long double cable stayed bridge to cross the Sunningesund River in 1997.

The planning phase took several years to find the best solution for integrating the new bridge into the protected and sensitive local environment with minimal impact. The new 9.3 km long bypass, constructed to motorway standard, shortened the old route by 12.8 km.

Delivered products

The onramp to the high elevation bridge was built using ILM bearings. From both abutments the steel box sections were pushed into their final position utilizing 40

mageba ILM bearings. Thanks to a special design and the use of high quality sliding material the incremental launch bearings allow the bridge segments to be launched into position over several hundreds of meters. After being used to position the bridge deck, only a minimal amount of work is required to transform the ILM-bearings into permanent bearings. The vertical loads on the mageba bridge bearings used for this project range from 5'500 kN to 16'500 kN and horizontal forces reach up to 1'900 kN. Due to the massive length of the bridge, the outermost bearings must have the capacity to accommodate up to +/- 560 mm of bridge deck movement. By using mageba incremental launch bearings the construction time was minimized and the overall cost of the bridge was reduced. Had traditional sliding bearings been used, the temporary bearings would have had

to be exchanged with permanent bearings after the construction was finished, which would have resulted in a more expensive and less time efficient solution.

Highlights & facts

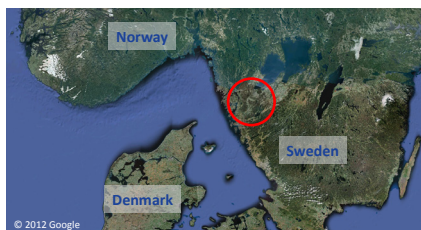
mageba-products:

Type: RESTON®ILM Incremental launch bearings
Features: max. vert. load 15'300 kN
max. hori. load 1'900 kN

Bridge:

City: Uddevalla
Country: Sweden
Type: Cable-stayed bridge
Length: 1712 m

The bridge shortens the route by 12,8 km



Reduction of the construction period by using the incremental launching method



mageba ILM- bearing placed on the pylon

