

 **Bridges****Reference Details:**

Owner National Motorway Company, Hungary +++
General Contractor Viaduct Consortium Hídépítő Rt. - Strabag Rt., Hungary +++
Engineer Metrőber Kft, Hungary +++
Design Hídépítő Rt., Hungary +++
Consultant Pont Terv Rt., Hungary

DSI Unit DSI Austria, Salzburg, Austria
DSI Services Supply of DYWIDAG Multistrand Tendons (about 1,000 pc. MA 6815 and 3,400 pc. MA 6819, including equipment).



DYWIDAG Multistrand Tendons secure one of the largest Interstate Bridges in Hungary

Köröshegy Bridge, M7 Interstate

One of the largest prestressed concrete interstate bridges in Hungary was built as part of the 15 km extension of the M7 interstate between Zamárdi and Balatonszárszó near Köröshegy. Construction of the bridge began in summer of 2004. This route leads from Slovenia to Budapest, passing south of Lake Balaton. Due to its limited construction time of only 21/2 years and the high demands made on the building technology, the bridge was definitely an engineering performance of outstanding importance.

Because of the 90 m height of the bridge and the short construction time, the 23.80 m wide deck that will carry two traffic lanes is being built using the prestressed concrete construction method instead of a combination of steel or composite structure.

The bridge superstructure is supported by 16 piers erected on bored piles in the range of 1.2 to 1.5 m in diameter and depths of 22 to 29 m. The height of the piers varies between 1 m at the edge of the valley and 90 m in the middle of the bridge. The piers were built in 5 m sections using a climbing formwork system. The 17 bridge spans (60 m + 95 m + 13 x 120 m + 95 m + 60 m) were built using the cantilever method and post-tensioned with DYWIDAG Multistrand Tendons. Starting from the piers, each span was built to the right and left in one pour each and then the segments were post-tensioned against each other. A special feature here was a pour section of 11.0 m length that requires a travelling formwork hanging from a girder that rests on three piers above the bridge span.

This enabled the construction work to be carried out at large heights in relatively short time.