

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

Client Taiwan High Speed Rail Corporation, Taiwan +++ **General Contractor** JV of Samsung, Korea / Doosan, Korea / IE&C, Taiwan +++ **Designer** Byucksan, Korea / PBMM, Singapore / CTCL, Taiwan +++ **Checking Engineer** Hyder, England

DSI Services

Construction of 6 cantilever bridges by employing 3 sets of DYWIDAG Formtravellers; Supply and installation of 544 sets DYWIDAG Anchorages type 0.6" MA with accessories; Technical assistance.

**DYWIDAG Formtravellers used for construction of cantilever segmental bridges****Construction of Balanced Cantilever Method Bridges in Taiwan High Speed Rail Project C280, Chayi to Tainan, Taiwan**

Commenced in May 2000, Contract C280 is one of twelve civil work contracts of the Taiwan High Speed Rail Project, Taiwan's largest infrastructure project to date.

The contract is divided into three separate lots: the 16.9 km long Lot 1, built by Samsung Corporation, and the rest 17.5 km Lot 2 and 3, built jointly by Doosan Heavy Industries and IE&C Corporation. Passing through a wide alluvial plain cultivated with rice, sugar, vegetables and fruit,

the alignment totalling 34.5 km in length, generally lies parallel to and crosses the routes of the existing railway and freeway in Chayi and Tainan County of southern Taiwan. A number of shallow streams and rivers cross the alignment that are subject to flooding during heavy rains. The 13.6 m wide prestressed concrete mono-box girder viaduct thus becomes the dominating structure type throughout the route.

In Lot 1, DSI Taiwan was awarded the subcontract to build the superstructure of two cantilever bridges, all crossing existing highways. The main scope of work includes construction of cast-in-place segments by employing two sets of DYWIDAG Formtravellers and the supply of DYWIDAG Post-Tensioning Systems. A total of 440 sets of type 0.6" MA Anchorages, 3,100 m³ of concrete and 880 t of steel reinforcement will be used for the work.

In Lot 2, DSI Taiwan was also awarded the subcontract to build the superstructure of two cantilever bridges, one crossing an existing highway and the other passing over the Pa-Chang River. The main scope of work includes construction of cast-in-place segments by employing one set of DYWIDAG Formtravellers and supply of DYWIDAG Post-Tensioning Systems. A total of 104 sets of DYWIDAG Anchorages type 0.6" MA, 2,000 m³ of concrete and 183 t of steel reinforcement will be used for the work.

The subcontracted works are scheduled for completion in late 2003.