



Bridges

Reference Details:

Client Taiwan High Speed Rail Corporation, Taiwan +++
General Contractor JV of Shimizu, Japan / Evergreen, Taiwan +++
Designer Moh and Associates, Taiwan +++
Checking Engineer T.Y. Lin, Taiwan

DSI Services Supply of 9 sets of DYWIDAG Formtravellers; Supply and installation of 1,476 sets DYWIDAG Anchorages type 0.6" MA with accessories; Technical assistance.

**Cantilever segmental bridges built using DYWIDAG Formtravellers, Taiwan****Construction of Bridges with Balanced Cantilever Method in Taiwan High Speed Rail Project C291, Tainan, Taiwan**

Construction works for Section C291 are being executed by a joint venture between Evergreen Construction Corporation and Shimizu Corporation (ESJV) and began in April 2000. This section is 28.5 km long and is located approximately parallel to the existing railway and Freeway No.1 in Tainan County of southern Taiwan. As C291 consists entirely of viaducts, ESJV selected a mix of movable scaffolding system (MSS), cast-in-place (CIP) and free cantilever method (FCM) for the execution of its superstructures. Since Section C291 is part of the test track, the owner required that it shall be completed well ahead of all other HSR civil contracts.

Hence, appropriate planning and accurate execution are critical in meeting C291's extremely compressed construction schedule. This is of paramount importance since the free cantilever bridges are usually the critical element in the construction progress.

DSI Taiwan was awarded the subcontract to build the superstructure of all nine cantilever bridges on Contract C291. Seven of them cross existing freeways and highways, but two cross over the Er-chia river and Tzeng-wen river, respectively. The scope of work includes construction of cast-in-place segments by employing nine sets of DYWIDAG Formtravellers and supply of DYWIDAG Post-Tensioning Systems. A total of 1,476 sets of DYWIDAG Anchorages type MA, 15,400 m³ of concrete and 3,100 t of steel reinforcement will be used for the work.

The subcontracted works are scheduled for completion in late 2003.