

Structural type Characteristics

HSL Madrid- Alicante. Acequia del Rey & Cordel de Sax Viaducts

Stretch Villena-Sax, Alicante, Spain / 2010

prestressed concrete box cirger bridges main span 32.0 m, total length 1.394 y 1.498 m Project: PROINTEC / Technical Support: FCC Construcción



The section Villena-Sax of the High Speed Railway Line Madrid - Levante includes the construction of two great length viaducts: Acequia del Rey and Cordel de Sax. The first one has a total length of 1,394m divided into 44 spans with the following arrangement: 25m+42x32m+25m. The Viaduct over the Cordel del Sax has a total length of 1,458m divided into 46 sections with the corresponding span lengths: 25m+44x32m+25m.

Longitudinal horizontal forces are resisted by means of fixed pot bearings placed in the three central piers and shock transmissors in the abutments. The whole deck is continous between the abutments, with expansion joints located only in the abutments.

The deck is a post-tensioned concrete voided slab built span by span with movable scaffolding system (MSS). Construction started from the centre and advancing simultaneously towards the abutments.



