

■ Viaducts in the High Speed Railway Madrid-Levante (Section Villena-Sax)

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 de 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 continuous 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.



Spain /2011 Project data

Structural Type:
Post-tensioned voided slabs
Location:
Villena (Alicante)
Opening Date:
2011
Owner:
Ministry of Public Works
Construction:
2010
Scope of Works:
Detailed design and technical
support during construction