

Bridge over the River Sil

The bridges over the River Sil comprise two composite truss bridges with three spans of 93.50m, 170.0m and 93.50m each and a width of 13.20m. Each bridge has two trusses which vary in depth running from 4.0m at the abutment and span centre to 10.0m at the piers. The truss beams constitute boxes of upper, lower and diagonal chords or booms. Their upper and lower chords are 0.60m by 0.45m and the diagonal ones 0.40m by 0.45m. Their nodes have been especially designed in order to simplify the construction.

The final structural solution comprises a double composite action: a concrete slab with varying depth from 0.50m to 0.25m has been cast over the lower chord. The hollow slabs of the piers are 56.0m high. Their outer cross section is 6.50m x 3.0m with a depth of 0.40m. In order to control the effects of longitudinal instability of the piers, possible displacement in that direction has been limited by means of a special system connecting the deck to the abutments.



Spain /2000 Project data

Structural Type:
Composite truss with spans
of 93.50m, 170.0m and 93.50m.
Location:
Northwestern motorway between
San Roman de Bembibre and
Villafranca del Bierzo. León
Opening date:
July 2000
Proprietor:
Ministry of Public Works
Construction:
ACS Proyectos Obras y Construcciones
Launching Operations:
Lastra Ibérica
Scope of Works:
Construction and Repair Projects
and Technical Assistance