

Structural type Characteristics Owner Client Constructor Scope

## Puerta de Hierro viaducts

Madrid, Spain / 2000

composite double deck
2 parallel viaducts with 413,17m and 265,17m total lengths / Typical span: 25m / Main span: 40m
Ministerio de Fomento
ACS Proyectos Obras y Construcciones
acs proyectos obras y construcciones.
detailed design and construction support



The Puerta de Hierro bridge consists of two parallel viaducts, one 413.17m long and the other 265.17m, which begin on the N-VI motorway, they pass over the M-30 ring-road motorway and even over the N-VI itself. The standard span length is approximately 25.00m with a single maximum 40.0m span which crosses the N-VI motorway. The deck has a constant 1.25m depth but is deepened at the supports of the main span. The pier shafts are either rectangular or conically tapered, depending on their position.

The two viaducts were built placing the steel boxes, section by section, with the help of cranes. The upper concrete slab was built with a receiving slab on which reinforcement was placed and subsequently concrete was cast on top.



