EGNATIA ODOS S.A. SECTION 1.1.7 / BRIDGE OF MESOBOUNIO AT CHAINAGE 11.0+220.0

PROJECT BUDGET:4.695.500 €CONSTRUCTION:MECHANIKI S.A. (2000-2002)STRUCTURAL DESIGN:DENCO S.A. - KANON CONSULTING (1999-2000)

The Mesobounio bridge consisted of two independent branches, one for each direction of traffic. The total deck width was 12.95m: 11.0m for the road surface and 1.95m for the two sidewalks, with a marked 65cm gap between the two bridge branches.

The total length of the right branch of the bridge was 257.47m (37.46+59.93+100.10+59.98), while that of the left branch was 260.00m (38.54+61.19+100.40+59.88). The deck was integrally connected to the middle piers M2 and M3 and supported by pot bearings located at both the abutments and at pier M1. The deck had a box cross-section with variable heights, ranging from 5.80m to 3.40m for the middle span M2-M3, and 5.80m to 2.60 for spans M1-M2 and M3-A2. Finally, measurements remained unchanged - equal to 2.60 μ - for span A1-M1. In addition, the deck was constructed using the balanced cantilever method.

The middle piers M2 and M3 had 3.30x5.50m box sections, with a height of approximately 35m. The foundation of the piers was shallow due to the rocky terrain. To address this, we constructed a unified footing for both branches for the middle piers M2 and M3, while we constructed single footings for each branch - and at a different support level - for M1.

While the majority of the bridge was constructed using the balanced cantilever method, a conventional formwork was used to construct the span A1-M1 and the last 12.50m of the span M3-A2.



Egnatia Odos: Longitudinal section of the left branch and cross section of the bridge of Mesobounio



Bridge of Mesobounio: The construction of the superstructure has been completed