MARMORE BRIDGE



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MARMORE BRIDGE

Location

Terni, Italy

Client

Anas S.p.A.

Contractor

Consorzio stabile Uniter

Scope of work

Design, fabrication and installation of steel structures

Period of execution

2006-2008

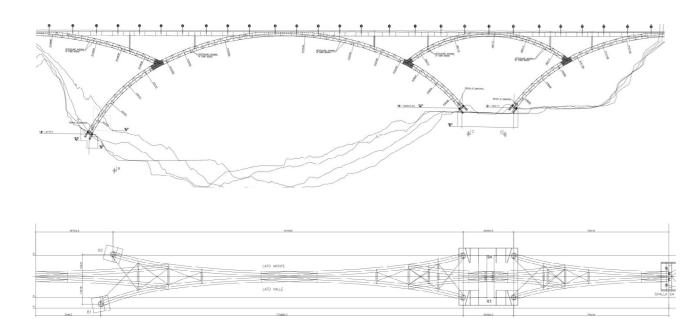
Weight 2.500 tons

Length

302 meters (31+173+98)

The Marmore Bridge crosses the Nera River and the state highway S.S.N. 209. It has a key role for the local road network by reducing travel time between the cities of Rieti and Terni from one hour to only fifteen minutes, avoiding a dangerous route.

The structure of this arch bridge is composed of a pair of steel pipes with a diameter of 2200mm including an internal reticular bracing system, necessary to maintain the geometry during the first assembly phases, as well as external crossbuck bracings connecting the different elements. The bridge has a total length of 302 meters with a width of 12 meters. Strain gauges have been used both during the construction and testing phases to measure possible deformations of the main structures, either due to mechanical stress in case of loads or to



thermal reasons in case of variations of the temperature. To safeguard as much as possible the environment, the bridge was built at a height of 70 meter from the ground without the aid of any temporary support structure: instead, to

ensure stability and resistance during the assembly phase, the structure has been supported by steel cables that also added an internal elastic coaction. Altogether, the weight of the steel structure amounts to 2.500 tons.

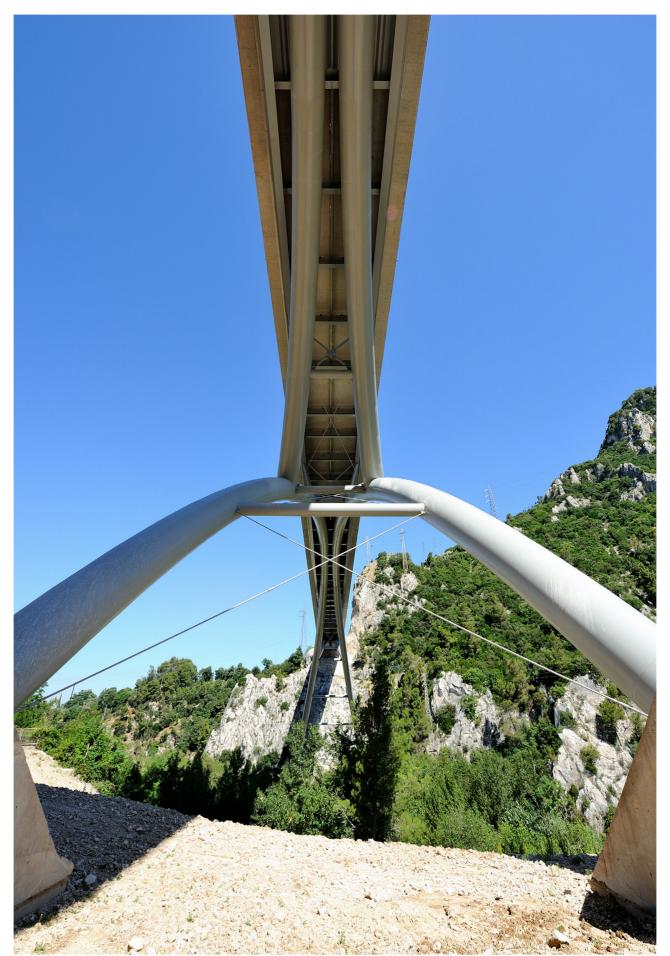




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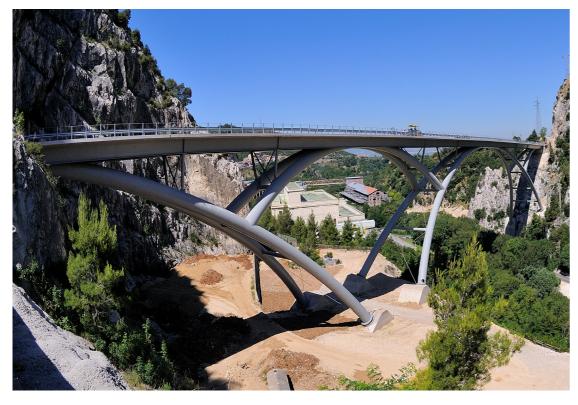






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