



La Malata bridge

Ferrol harbour, Spain / 2020-2024

Owner
Client
Constructor
Scope

Autoridad Portuaria de Ferrol - San Cibrao
UTE Eptisa - APPlus (ATDO), UTE Copasa - Geotunel - Ogmios (Constructora)
UTE Copasa - Geotunel - Ogmios
detailed design



The structure is divided into two sections with different typologies:

- The first section, 210 meters long, located between abutment 1 and pier 11, is the access viaduct over the Fernández Ladreda dock. It consists of a post-tensioned lightweight concrete slab.
- The second section, 396 meters long, located between pier 11 and abutment 2, is the steel bridge that crosses the inlet. It consists of a double continuous truss with a variable depth and a lower deck, designed and engineered by Fhecor.

This structure consists of a single continuous deck with 7 spans, with lengths of 45.00 + 63.00 + 63.00 + 63.00 + 63.00 + 63.00 + 36.00 meters between axes, resulting in a total length of 396.00 meters.

The deck features a double continuous truss with a variable depth and a lower deck. The truss girders are positioned at the edges, spaced 7.97 meters apart between axes. The trusses are of the Warren type, with a variable depth—maximum of 6.20 meters at the supports and a minimum of 3.00 meters at mid-spans and at the extreme compensation spans. This design results in approximate slenderness ratios of L/10 at the supports and L/21 at mid-span.



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