

Characteristics

Owner Client

## Rehabilitation of international railway bridge over Bidasoa river

Hendaya, France - Irún, Spain / 2017-2021

Length 114m, construction in 1860

ADIF

Scope repair project and monitoring



Designed by French engineers and completed in 1864, this example of the best stone bridge engineering has been restored according to FHECOR's design. Its 160 years of service are proof of the durability and sustainability of masonry bridges.

The €1.5 million investment has been divided between the restoration and the environmental integration actions in the bay of Txingudi. The faces of the vaults, spandrels, piers and abutments have been restored and the foundations have been protected with rockfill.

The project includes innovative stitching techniques using fibreglass rods coated in resin and sand. In the central vault, which was blown out in 1943 and replaced by a reinforced concrete thread, the restoration has involved adding an additional 10 cm of soffit with a configuration that reproduces that of the original ashlar masonry with hydraulic lime mortar.

The work has been completely cleaned and the coats of arms of Isabella II and Napoleon III have been restored, recovering the monumental character of the first railway link between Spain and France.

It is FHECOR's maxim that the restoration restores the bridge to its original configuration and results in minimal maintenance costs.



