Breakwater repair

Bayonne, France

Being located at the Atlantic coast of France, the harbour of Bayonne is regularly exposed to stormy weather. In the 1960s, a breakwater was erected to protect the entrance channel. It included a wall and also a platform wide enough to accommodate a heavy duty crane used to place and re-position the 40 t concrete blocks that cover the exposed outside of the structure.

For the renewal in 2014, the authorities specified stainless steel and opted for the proven 22 % chromium, 5 % nickel duplex stainless steel grade whose additional molybdenum and nitrogen contents provide superior corrosion resistance and mechanical properties. As grade EN 1.4462 in the ribbed condition has a minimum yield strength of > 750 MPa, rebar diameters could be reduced, which contributes to the overall economics of the stainless steel solution.

Details

- **Environment:** Marine
- **Stainless steel grade:** EN 1.4462
- **Product type:** Rebar
- **Dimension:** 10 mm and 12 mm Ø
- **Total quantity:** 130 t
- **Producer or supplier:** Ugitech
- **More information:** ugitech.com

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Aerial view

*Strengthening of the rock embankment*

*Drilled holes*

*Cavities to be filled*

*Reinforced concrete slab with anchors on the underside*

*Strengthening with 40T blocks*