

COLD BONDING USING BELZONA 7311 ON A YACHT HULL

ID: 9834



PROBLEM

The requirement for a long term structurally sound solution to cold bond a Hawse pipe structure and anchor pocket to a yacht hull.

APPLICATION SITUATION

This Customer was looking for a cold bonding solution to bond a Hawse pipe structure and anchor pocket to their yacht hull. The anchor pocket, which was made of stainless steel, is typically secured either mechanically through heavy bolting or welding, often with the use of bimetallic coupling plates to ensure compatibility between dissimilar materials. This process is technically complex, as welding dissimilar metals can often lead to significant corrosion issues, while mechanical anchoring risks water ingress can cause aesthetic defects such as blistering or water pockets beneath the yacht's hull coating.

APPLICATION METHOD

The hull and the plates were first mechanically prepared according to SSPC-SP11 standards. Belzona 7311 was the chosen solution and was used in conjunction with a threaded mechanical anchoring system. The two components were positioned and aligned using hoists, hydraulic jacks, and threaded rods acting as guides. This method offered several advantages as it guaranteed 100% adhesion across all contact surfaces, enabled bonding of dissimilar metals without causing corrosion or galvanic incompatibility, and provided a complete seal around the perimeter, effectively preventing water ingress.

BELZONA FACTS

The entire bonding process was completed within the working life of Belzona 7311, which was approximately less than one hour, ensuring effective application without compromising the material's performance.

INDUSTRY

Marine

LOCATION

Italy

APPLICATION DATE

July 2023

PRODUCTS

Belzona 7311

SUBSTRATE

Stainless-steel

PHOTOS

1. Structure that required the bonding solution.
2. Surface preparation complete.
3. Belzona 7311 applied.
4. Finished application of Belzona 7311.

For more examples of Belzona Know-How in Action, please visit khia.belzona.com

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

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