

BELZONA RESTORES 18 STRIPPED THREADS ON YACHT

ID: 10202



PROBLEM

Handrails on the ship's hull were subject to galvanic corrosion between the bolts and the hull, resulting in delamination of the surrounding coating. An insulating solution was required to prevent further deterioration

APPLICATION SITUATION

The bolts securing the handrails on the ship's hull induced galvanic corrosion due to metal-to-metal contact between the bolts and the hull. This corrosion resulted in rust formation, which not only compromised the integrity of the metal but also caused visible staining and blistering of the hull coating. It was previously noted that the data on the system Leaflet ENC-2 was outdated and as a result new testing should be done, this project is a result of this testing from corporate.

APPLICATION METHOD

The restoration of stripped threads on the ship, was carried out in accordance with ENC-2. The handrail threads were cleaned using Belzona 9111 prior to the application of three thin coats of Belzona 9411 Release Agent. The bolt holes were machined to a diameter around 10% larger than the bolts which were used. As abrasive blasting was not possible, Dremels/rotary files and burrs were used to create a suitable profile. The holes were then vacuumed to remove contaminants, followed by cleaning with Belzona 9111. Once Belzona 1111/1121 was mixed, both the bolt holes and the bolt threads were wet-out before additional material was injected. The bolts were then inserted using a twisting motion. The Belzona was allowed to cure in accordance with its IFU.

BELZONA FACTS

The client was very satisfied; in fact, the railings have been dismantled three times and the threads are still perfectly intact.

INDUSTRY

Marine

LOCATION

Palma

APPLICATION DATE

December 2025

PRODUCTS

Belzona 1111 (Super Metal)
Belzona 1121 (Super XL-Metal)
Belzona 9111 (Cleaner Degreaser)
Belzona 9411 (Release Agent)

SUBSTRATE

Carbon steel

PHOTOS

1. Delamination of hull coating due to galvanic corrosion
2. Belzona 9411 being applied to threads
3. Once the bolt and substrate are wet out the bolt can be inserted into the hole.
4. Complete application showing restored thread

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