

# BELZONA SOLUTION FOR REBUILDING & COATING OF STRUCTURE OF VESSEL'S HATCHES

ID: 9759

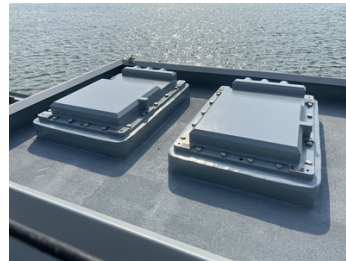
Industry: Marine  
Application: SOS-Ships and Offshore Structures

Customer Location: ABU DHABI, UNITED ARAB EMIRATES  
Application Date: September 2024

Substrate: Aluminum  
Products: Belzona 1161 (Super UW-Metal), Belzona 1321 (Ceramic S-Metal), Belzona 9111 (Cleaner Degreaser)

## Problem

The vessel's hatch structures suffered severe corrosion due to prolonged exposure to seawater and the harsh marine environment. This deterioration significantly affected operational efficiency, complicating the assembly and disassembly processes and preventing the proper closure of the hatch covers. Urgent intervention was necessary to prevent further structural damage and restore functionality.



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The surface was manually prepared to achieve the required profile as hot work was not permitted.

The damaged area was then rebuilt using Belzona 1161, a surface-tolerant material, ensuring strong adhesion and a durable repair.

Finally, two coats of Belzona 1321 (Ceramic S-Metal) were applied, following the Belzona application procedure (IFU), to deliver superior protection and long-term performance.

## Application Situation

The vessel's hatch requires extensive long-term corrosion protection, including rebuilding and coating, to preserve its structural integrity and enhance its durability for the future.

## Application Method

The application was carried out in accordance with Belzona Know-How System Leaflets SOS-1 and SOS-2.

1. After a thorough cleaning, the surface was manually prepared to achieve the required profile, as hot work was not permitted.
2. The damaged area was then rebuilt using Belzona 1161 (Super UW-Metal), a surface-tolerant material, ensuring strong adhesion and a durable repair.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015  
FS 695214  
ISO 14001:2015  
EMS 695213

Belzona products are  
manufactured under an ISO  
9000 Registered Quality  
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Repair • Protect • Improve

3. Finally, two coats of Belzona 1321 (Ceramic S-Metal) were applied following the Belzona application procedure (IFU) to deliver superior protection and long-term performance.

## Belzona Facts

Belzona 9111 is a high-performance cleaner and degreaser designed to effectively remove contaminants such as oils, grease, dirt, and other residues from surfaces before applying Belzona repair and protection systems.

Belzona 1161 (Super UW-Metal) is a two-part epoxy metal repair solution that bonds to wet and oily surfaces. It cures at room temperature and offers excellent chemical resistance, making it ideal for sealing leaks, repairing cracks, and providing corrosion protection. It is compatible with various metals, including steel, aluminum, and copper.

Belzona 1321 (Ceramic S-Metal) is a high-performance, two-part epoxy coating designed for metal repair and protection. It offers exceptional resistance to wear, abrasion, and corrosion, making it ideal for resurfacing and restoring damaged metal components. Suitable for both ferrous and non-ferrous metals, it can also be machined after curing.

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