

Belzona Bracket Bonding on a Warship

ID: 10246

Industry: *Military*
Application: *SOS-Ships and Offshore Structures*

Customer Location: *Devonport, New Zealand*
Application Date: *April 2026*

Substrate: *Carbon steel*
Products: *Belzona 1161 (Super UW-Metal)*

Problem

New safety barrier chains were required in all RADHAZ areas of the upper deck, conventional methods of attaching the brackets to which the chains will attach were deemed an unnecessary risk and expense. The client reached out and requested that we provide a cold-bonding method of attaching the brackets with good adhesion and longevity.



Client demonstrated the optimum location for the installation



an MBX was used to remove existing paintwork and profile the area outlined for installation



Surface profile was measured to an acceptable 55-65 microns in the installation areas



Belzona 1161 (Super UW-Metal) was chosen due to unpredictable weather conditions, once the brackets had been applied, tape was used to secure the bracket into position whilst curing

Application Situation

The vessel was due on active service later that month and time was a major factor for all intended refurbishments. This particular project was deemed a priority but due to safety concerns around welding and issues with approvals for conventional work the client needed a cold bonding solution with high adhesion and longevity. The Belzona 1161 (Super UW-Metal) solution provided a fast, safe and long-lasting solution.

Application Method

No specialist tools were required for this application; Surface preparation was completed using a battery grinder and an MBX to ensure it complied with the SSPC-SP11 specification. Belzona 1161 (Super UW-Metal) was mixed in small quantities and applied using a short, bristled brush to both the bracket and the bulkhead. The 1161 (Super UW-Metal) on the bracket was peaked in the centre with an applicator to ensure good squeeze out upon contact, this extruded product was then removed with a clean spatula.

Belzona Facts

The client had no alternative that fit with the timeframe for this modification. Belzona provided a fast and safe solution that ensured that off-limits areas of the upper deck remained safe during periods when the vessel was transmitting.

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FS 695214
ISO 14001:2015
EMS 695213

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