

# Belzona Elastomers for Fender Repair in New Zealand

ID: 10083

Industry: Marine  
Application: SOS-Ships and Offshore Structures

Customer Location: Auckland Port  
Application Date: July 2024

Substrate: Rubber  
Products: Belzona 2131 (D & A Fluid Elastomer), Belzona 2921 (Elastomer GP Conditioner), Belzona 9411 (Release Agent)

## Problem

Deep gouges and loss of the original substrate was causing mooring ropes to catch and cause further damage to the fender of a tugboat. Replacement would involve a large amount of time and considerable cost



Large tears and gouges reduced the efficacy of the Fender and caused ropes to become caught

Damaged areas were cut back to remove any loose material, and then prepared with a rotary burr before conditioning with GP Conditioner

Dams were glued in place to retain the Belzona product during curing

Belzona 2131 (D&A Fluid Elastomer) fluid was mixed with shredded rubber aggregate and applied into the repair areas

## Application Situation

The ship would normally need to stay in dry-dock whilst a new Fender was delivered and installed, this would have cost in the region of \$40,000. The owner estimated it could be as much as a month. The Belzona repair was completed in three days at a fraction of the cost of a new Fender.

## Application Method

All damaged areas of rubber were cut back and removed using a sharp knife. The areas intended for repair were then undercut to provide strong mechanical adhesion, prepared with a rotary burr to achieve a rough profile in line with the specification and conditioned with Belzona 2921 General Purpose Conditioner. Plastic formers were released using Belzona 9411 and glued in place where necessary. Belzona 2131 (D&A Fluid Elastomer) was then mixed and added to a litre of shredded rubber aggregate (per unit) to bulk it out. This was then applied into the prepared areas until flush with the original substrate and allowed to cure. Polythene sheet was taped down and pulled over these repairs to achieve a smooth finish.

## Belzona Facts

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 Management System.

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The Belzona repair resulted in a saving of over \$30,000 for the client, a tricky refit and weeks in dry dock. The added benefit was the impact and abrasion resistance of the Belzona 2131 (D&A Fluid Elastomer) has prevented the same damage from occurring again.

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