



Project Data

Location	New Zealand
Completion	2012
Project Type	Corroded Steel Piles on a Floating Wharf
Products Used	SeaShield Series 500: SeaShield Fiber-Form Jacket and SeaShield 550 Underwater Epoxy Grout

Project Details

About 4 hours North of Auckland is the Bay of Islands, a place synonymous with big game fishing and tourism. It is also a port of entry into New Zealand for the international sailing community. Infrastructure at Opuia caters for international arrivals including the strategically important Opuia Marina. This consists mostly of steel piles, now needing corrosion protection. The challenge with this protection system is that it had to accommodate the floating wharf. Denso New Zealand Ltd approached this potential customer after reading about their problem in an infrastructure magazine.

Due to the abrasive action of the floating wharf collars, the SeaShield Series 2000FD solution was ruled out. It was agreed to install the SeaShield Series 500 system. This system allowed Denso (NZ) to accommodate a customer requirement to tint the jacket to conform to the Marina color scheme. Working with the Marina engineers and Marine and Civil Solutions, Denso New Zealand designed an application to take into account the dynamic situation. The solution was to lower the profile of the High Density Polyethylene (HDPE) ring and modify it to accept the jacket and jacket joint. This left enough room to install a 3mm jacket and 12.5mm annulus within which to fill the epoxy grout. It was decided due to working depths and time constraints to pour a plug and then pump the SeaShield 550 Underwater Epoxy grout.

After the installation, the jacket not only provided a form for the corrosion protection system, but also a harder surface on which the HDPE can be utilized as a sacrificial surface. This ring is then easily replaced under a standard maintenance system. As some of the piles on the attenuator wharf have headstocks, it was a practical suggestion which would allow the Marina to continue operating as New Zealand's premier port of entry for the sailing community.



Date Published: 06/2012

Denso North America - Canada (Ontario)
90 Ironside Crescent, Unit 12 / Toronto, M1X 1M3
Tel: 416-291-3435 Fax: 416-291-0898
sales@densona-ca.com

www.densona.com
A Member of Winn & Coales International

Denso, Inc. - USA
9710 Telge Road / Houston, TX 77095
Tel: 281-821-3355 Fax: 281-821-0304
info@densona.com