



132t Structural load test of passenger walkways completed within 4 hours

| | |
|-----------------|--|
| Client | Stena Line |
| Country | Holyhead, UK |
| Date/ Year | 2015 |
| Service details | We specialise in the design, manufacture, supply and support of two main product lines: inflatable buoyancy products for diving, salvage and installation operations, and waterbags for the load testing of cranes, davits, lifeboats, gangways and other load-bearing structures. Get in touch with us at buoyancyballast@uniquegroup.com |

Summary of the Project

Unique Group's Buoyancy & Ballast division successfully completed a 132tonne structural load testing of the upper and lower passenger walkways for the HSS ferry in less than 4 hours.

Client Requirement

The client approached Unique Group to perform structural load testing of the upper and lower passenger walkways for the HSS ferry at Holyhead terminal. The project was a challenge as it needed to be completed within time and operational constraints.

Unique Solution Delivered

On analysis of the requirements and constraints, Unique Group's engineers and the client team agreed to apply a total load of 132 tonne (68 tonne per walkway). The structural load test would be performed with the ferry attached to the walkway.

The complete work was carried out overnight to allow for the rapid tidal conditions and to cause no disruption to the sailing timetable. The client had provided us with a time window of 4.5 hours to complete the project.

Unique Group's Water Weights brand used a series of specially designed flexitainers, manifold systems and extra pumping solutions to perform the structural load test. The client was very satisfied with our service as we completed the load test ahead of schedule, in less than 4 hours.



Unique Group
Strength in Depth

Division : Buoyancy & Ballast

Benefits delivered

- On-site Support and quick mobilisation
- Experienced technical team
- HSEQ Compliant
- Project completed within schedule



Let's Compare : Wax-Tape vs Paint

| Index | Paint | Wax-Tape System |
|---|---|--|
| Ease of application | | |
| Abrasive blast | Required | Not required (Hand brushing/commercial blast) |
| Surface controls (salt, T°, roughness, etc.) | Required | Not Required |
| Faster Installation | | |
| Tools for application | Airless / spray pump | No special tools |
| Curing time | Required (overall and between layer) | No |
| Trained operator | Requested | Limited training |
| Asset life increased | | |
| Life expectancy | Lasts only for two years- making asset prone to corrosion | Long lasting protection –increases asset life by 15 years and more |
| Customised solution | | |
| Complex shape (fittings, clamps, etc.) | Need substrate treatment on sharp angle, several layers nearby angles | Conformable to any shapes |

Our Wax-Tape can be used for operational temperature from -40° to +110°C

Let's Compare : Wax-Tape vs other tape systems

| Index | PE Tape | Visco-elastic tape | Wax-Tape System |
|---|------------------------|--|---------------------------|
| Ease of application | | | |
| Surface preparation | ST3 or SA 2 ½ | ST3 or ST2 | ST2 |
| Surface controls (salt, T°, roughness, etc.) | Required | Requested (Isopropyl alcohol cleaning) | Not Required |
| Substrate T° 3°C above Dewpoint | Requested | Requested with conventional system | Not requested |
| Release paper (speed/ease of application) | Yes | Yes | No |
| Faster installation | | | |
| Tools for application | Yes (wrapping machine) | No | No |
| Trained operator | Requested | Requested | Limited training |
| Customised solution | | | |
| Complex shape (fittings, clamps, etc) | Mastic required | Mastic required | Conformable to any shapes |

Long lasting protection – increases asset life by 15 years and more