



Inflatable Buoyancy Units facilitate float out at Damen Galati Shipyard

Client	Damen Galati Shipyard
Country	Romania
Date/ Year	2018
Service details	<p>Our multi-attachment Inflatable Buoyancy Units (IBUs) are designed for safe operation in applications like pipelaying, shallow-water salvage and towing, and draught reduction.</p> <p>The buoyancy of each IBU can be controlled from the surface during and after operations. It means users can safely apply and remove the Seaflex IBU to the load at zero capacity, only activating the buoyancy when needed.</p> <p>If you are looking for a solution for your Buoyancy & Ballast requirements, write to us: buoyancyballast@uniquegroup.com</p>

Summary of the Project

Unique Group's Buoyancy & Ballast division recently facilitated a high-profile dry dock project in Romania, involving the supply and operation of 840t of Seaflex inflatable buoyancy.

Client Requirement

The hull and lower decks of the Australian Antarctic Division's (AAD) new icebreaker Nuyina was constructed in the dry dock at Damen's Galati Shipyard. For the next phase of construction, the installation of the upper decks, to take place the dry dock needed to be flooded and the hull then towed to the wet dock.

The client wanted us to determine the size and position to secure the buoyancy units to the hull, to ensure sufficient clearance between the sill of the dry dock and the keel of the vessel when the dry dock is flooded.



Some of the 42 x 20t Seaflex IBUs installed on the hull within the drydock prior to tow-out

Unique Solution delivered

Detailed engineering discussions took place over 18 months ahead of the work to determine the sizing, positioning and securing of the inflatable buoyancy units to the hull, to ensure sufficient clearance between the sill of the dry dock and the keel of the vessel when the dry dock was flooded.

42 x 20t Seaflex Inflatable Buoyancy Units and a system of hoses and manifolds were supplied to Damen on a rental basis, and two of our technicians were deployed to offer on-site support throughout the two-week operation which took place during the early autumn of 2018.

- The advantage of flexible buoyancy is that it packs down small, so the transport of the equipment to and from the shipyard was done at sensible rates.
- When on-site, the relative lack of weight of the products (approx. 1% of their capacity) compared to solid buoyancy modules allowed them to be easily fitted up to the hull and then inflated to activate them when required.
- The solution is perfect for temporary buoyancy needs within relatively shallow waters, we have the equipment and expertise to deliver safe, effective and extremely cost-effective solutions to clients.



As the water level rises, the 20t Seaflex IBUs begin to support the weight of the hull

Benefits delivered

- **Turnkey proposition** - tailored to the demands of the project
- **Technical Expertise**- We supported the client from the early engineering phase to project completion offering genuine technical assistance
- **Versatile Solution** – This can be used in applications ranging from pipelaying and cable laying to diving and salvage operations as well as to draft reduction projects such as this.
- **Commercially economical** - client benefitted commercially from Unique Group's Seaflex brand being able to offer a rental option on this equipment instead of purchase.
- **On-site Support**- We provided on-site support throughout execution.

Mark De Wolf, Project Manager at Damen Shipyards said: "Having worked with Unique Group on a similar, if smaller-scale, application in the Netherlands a few years ago, we were confident in the company's ability to ensure a successful outcome on a much greater scale for the Nuyina project. We have been delighted with the level of support Unique Group provided to us through the full project lifecycle."