Seaflex Mono Buoyancy Unit (MBU) Overview

Helping contractors work more safely, efficiently and profitably since 1987.

www.uniquegroup.com
Mono Buoyancy Units (MBUs) - Changing the Pipelaying Market

**Designed for High Load Angles**

Through listening to our customers, Seaflex has developed the MBU - a pioneering way of combining the different and hitherto incompatible operational benefits of our ALBs and IBUs.

The Seaflex MBU is enclosed buoyancy, but it has the essential advantage of having a single attachment point like an ALB, which makes it as tolerant to load angle as the parachute-type bag. So, unlike any other enclosed lifting bag in the world that we are aware of, the Seaflex MBU can be used in line with the load, and can be lifted through. Each Seaflex MBU design has been tested and proven to demonstrate a safety factor in excess of 5:1 on a pull through its axis (e.g. the 5t MBU design has been proven to resist a through-load of more than 25t). These loads are transmitted through the bag via a proprietary through-strop design, and as of today we are the only manufacturers to be able to demonstrate via testing that their product of this type is capable of offering any sort of safety factor over and above the capacity of the bag itself.

**Easy to Handle and Deploy**

MBUs are a more practical alternative to solid buoyancy in many situations, and are exceptional within towing scenarios. As they can be simply lifted from a single point, they can easily be recovered by crane with no possibility of tearing of the strop pocket or canopy. And 500t of MBU lifting capacity can fit into a single 20ft container.

**User-controlled Buoyancy Variation**

During the mobilisation phase, and particularly important during demobilisation, the air can be introduced and released.

**Made to Last**

Made of our toughest High Tensile Trevira® Polyester 3/3 base cloth coated with heavy duty UV stabilised PVC coating, MBUs are massively reinforced with six reducing concentric rings of fabric layers at each end, and are terminated with a custom made stainless steel lifting ring fitted into this reinforcement, rather than having a having an external harness or system of strops, which would lend themselves to being connected onto for convenience, and to damage being caused to the bag as a result.

**Tested, Proven, and Changing the Market**

Seaflex MBUs are available in 1, 2, 3 and 5 ton lift sizes, and as with all our products they are fully type tested and proven to the relevant international standards.

Since their introduction, many pipelaying contractors who were previously taking standard IBUs from Seaflex or from one of our competitors have now made the switch to be able to benefit from the unique operational advantages of our proprietary MBU design.
Key Features and Benefits at a Glance

For Your Ease of Operation

- Lightweight (approx 1% of capacity) and packed small for fully compliant with IMCA D-016 recommended 5:1 factor of safety.
- Overall assembly physically tested and proven to exceed a 5:1 minimum WLL safety factor. Independent Type Test Certificates are available.
- Fitted with multiple pressure relief valves to ensure safety during use.
- RF welded seams.
- Structural through-strop for transmission of lifting loads.

For Your Peace of Mind

- Designed to transmit through-loads via single central connection, can be lifted via this point, can even be moored onto.
- Rental units inspected and tested between every single job.
- Buoyancy of individual or multiple units can be increased or decreased as required from the surface.
- 2 x 3/4 inch BSP standard inflation/deflation valves with 316 stainless steel male Camlock adapter as standard.
- Leaffield Marine high flow pressure relief valves (PRVs).
- Delivered in an enclosed crate and ready for immediate use with universally compliant documentation: MBU specific log book containing certification, service records and operating manual.

<table>
<thead>
<tr>
<th>Model No</th>
<th>Lift (Kgs)</th>
<th>D (Mtrs)</th>
<th>H (Mtrs)</th>
<th>Wt (Kgs)</th>
<th>L (Mtrs)</th>
<th>W (Kgs)</th>
<th>H (Kgs)</th>
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<tbody>
<tr>
<td>1 MBU</td>
<td>1,000</td>
<td>1.5</td>
<td>1.5</td>
<td>15</td>
<td>0.6</td>
<td>0.5</td>
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<td>1.7</td>
<td>18</td>
<td>0.75</td>
<td>0.6</td>
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<td>1.5</td>
<td>2.2</td>
<td>27</td>
<td>0.8</td>
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</tr>
<tr>
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<td>5,000</td>
<td>1.75</td>
<td>2.2</td>
<td>37</td>
<td>1.0</td>
<td>0.8</td>
<td>0.2</td>
</tr>
</tbody>
</table>
In 2011 Seaflex was acquired by the Unique Maritime Group, a global provider of integrated support services for the offshore sector. Unique Maritime Group’s expanding network of companies are specialists in ROV, diving, survey, NDT and engineering services. With the benefit of UMG’s global footprint and support structure, Seaflex is these days even better placed than ever to meet the needs of its customers – no matter where in the world they are working, nor how challenging or urgent their requirement may be.

As you would expect of a company working in an industry where the concepts of quality and safety are paramount, all our work is carried out within a system which complies with the ISO 9001: 2008 Quality Management Standard for full traceability – and we now have also gained ISO 14001 Environmental accreditation and ISO 18001 Health and Safety accreditation for our manufacturing operation. We have also had independent verification of the compliance of our Seaflex WaterLoad™ bags with LEEA 051 guidelines and of our Buoyancy bags with the requirements of IMCA D-016. ABS have also issued us with full Product Design Assessment (PDA) certification for our main products.

But any company can talk about the vast amounts of testing, certification and accreditation which have been carried on their products – fewer companies can substantiate such claims. Seaflex is one of those which can back up their claims – however, our credibility does not come from bits of paper: it comes from our customers, from the work we have been doing with them for over 25 years, and from the fact that they keep coming back to us time and time again.

Our Credentials

Seaflex manufactured our very first range of lift bags for rental and sale to service the diving industry in 1987, in sizes up to 500kg.

Over 25 years later, our biggest standard bag is 200 times larger than that at an industry-leading 100,000kg and we employ around 30 skilled staff at our custom-built 30,000 square foot manufacturing facility in Cowes on the Isle of Wight.

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Technology, Service and Support

MANUFACTURING TECHNOLOGY
All Seaflex products are designed and manufactured in the UK.
Our bag canopies are constructed from High Tensile Trevira® Polyester base cloth (either 2/2 or 3/3 fibre panama pattern weave) coated with heavy duty UV stabilised PVC coating or, for special applications, polyurethane. Trevira is incredibly strong; a 50 mm wide 3/3 strip has a break load of approximately 1 tonne.
The panels for our bags are precision cut on our 15 metre long, 3 metre wide advanced automated table for perfect repeatability. Once inspected and approved panels are assembled by skilled personnel to using Radio Frequency welding to strict quality control standards.

CERTIFICATION
All our work is carried out within a system which complies with the ISO 9001-2009 Quality Management Standard as audited by Lloyds Register Quality Assurance for full traceability – and we have now gained ISO 14001 and ISO 18001 accreditation.

SERVICE
Whether for hire or sale, all Seaflex products are sent out fully tested and inspected against their build criteria. And we do also offer on-site support to our clients in the use of our products – this most often happens within the more complex buoyancy applications for our products.

In the event that your Seaflex product should suffer minor damage in service, we can supply an approved, boxed field service kit comprising of patches, a professional quality heat gun and instruction manual to make good minor leaks prior to product refurbishment.

We can also advise on the viability of carrying out more extensive repairs, which would typically be undertaken either at our factory or at one of our approved service centres.

SUPPORT
Our support philosophy is “Wherever, Whenever”. This underlines the Seaflex commitment to not just sending out tested, proven products in proper shipping crates and with the most comprehensive documentation package in the business – but to assisting our customers in every way possible throughout their time using our products, whether the job is a hire project or an equipment sale.

We offer worldwide support to our customers via either email or phone from head office in the UK and via our ever-growing network of offices and partners around the world.

You can put your trust in Seaflex – we won’t let you down.
Our Philosophy

**Whenever, Wherever**

We have a simple philosophy here at Seaflex: we will do everything within our power to deliver what our customers need from us, whenever they need it and wherever they need it.

That simple philosophy is born of several different levels of understanding:

- An expert understanding of how to design, manufacture, prove, deliver and support best-in-class bags for ballast or buoyancy.

- An in-depth understanding of the regulatory environments in which we and our clients operate – both onshore and offshore.

- The desire to understand our clients’ businesses, and to work with them to achieve the best possible technical and financial outcome for them.

We are not complacent: we are only where we are due to our ability to keep our band of loyal customers happy, whilst adding to them by demonstrating to others the value which we can bring to their businesses. If we let that slip then we are nowhere. And that is why we keep investing in our business: to better serve your business. Hence the brand new factory capable of producing 3,500 tons of lift and water load testing capacity each and every month. And hence us holding and managing the largest global rental fleet of buoyancy and ballast bags.

As you continue to invest in us, we’ll continue to invest in you. We are always happy to hear from customers new and old alike as to how we may better serve you. We will travel the world to meet with you at your convenience, and the doors of our factory are always open and the kettle is always on for visits from those who would like to see what we do, and how we do it, for themselves.