

Seaflex Unexploded Ordnance Lifting & Safe Disposal System (UXO-LSDS) Overview



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

SEAFLEX™ UXO-LSDS

Safe, Simple Disposal

Proven Track Record

By pooling world-class technical expertise from within Unique Group's Diving, Survey and Buoyancy & Ballast divisions, the Seaflex UXO-LSDS has been developed to support all those working in the field of mine recovery. The system is based upon the robust Seaflex Mono Buoyancy Unit design, which has a proven track record over 20 years within the rigours of the offshore industry and is already in service with some navies as a "dumb" lifting device.

Remote Release via Acoustic Transponder

This is now integrated with housing for as many 9l, 300 bar composite cylinders as may be required, plus a Sonardyne Release Transponder (RT 6 -1000), to form the Seaflex LSDS.

Once the enclosed mine lifting bag is secured to the unexploded ordnance via a long lifting sling to maintain safe distance, the RT6 is remotely activated so as to fill the bag with only as much air as is required to commence the lift - and the unexploded ordnance can then be safely towed away for disposal.

Dual Inflation System, for Double The Safety

The integration of brand new Pressure Maintenance Valve (PMV) technology with the fitting of an increased number of Pressure Release Valves (PRVs), eliminates the risk of failure of the system due to over-pressurisation. Working with known UXO weights and water depths, the LSDS can be precisely filled to begin the recovery, with the excess air generated during the lift being safety vented from the PRVs.

Multiple Size Options

The Seaflex UXO-LSDS comes in 2 standard sizes at 500kg and 1t, but can be supplied in sizes from 250kg to 5t capacity. As many cylinders can be provided as may be required to fill the unit supplied.



SEAFLEX™ UXO-LSDS

Key Features and Benefits

For Your Ease of Operation

- Simple “Plug and Play” straight out of the box
- Deployable by divers or by ROV
- Lightweight (approx 2% of lifting capacity)
- Packs down small, easily transported & handled
- Dedicated transit case can be provided
- Lightweight composite cylinders
- Market-leading Sonardyne Acoustic Release Transponders



For Your Peace of Mind

- Simple “Plug and Play” straight out of the box
- Deployable by divers or by ROV
- Lightweight (approx 2% of lifting capacity)
- Packs down small, easily transported & handled
- Dedicated transit case can be provided
- Lightweight composite cylinders
- Market-leading Sonardyne Acoustic Release Transponders



Model No	Inflated (Kgs & Mtrs)			Packed (Kgs & Mtrs)			
	Lift	D	H	Wt	L	W	H
UXO-LSDS-250	500	0.6	1	8	0.4	0.2	0.1
UXO-LSDS-500	500	0.85	1.5	10	0.3	0.3	0.15
UXO-LSDS-1000	1,000	1	1.5	15	0.6	0.5	0.2
UXO-LSDS-2000	2,000	1.33	1.7	18	0.75	0.6	0.2
UXO-LSDS-3000	3,000	1.5	2.2	27	0.8	0.65	0.2
UXO-LSDS-5000	5,000	1.75	2.2	37	1	0.8	0.2

SEAFLEX™ UXO-LSDS



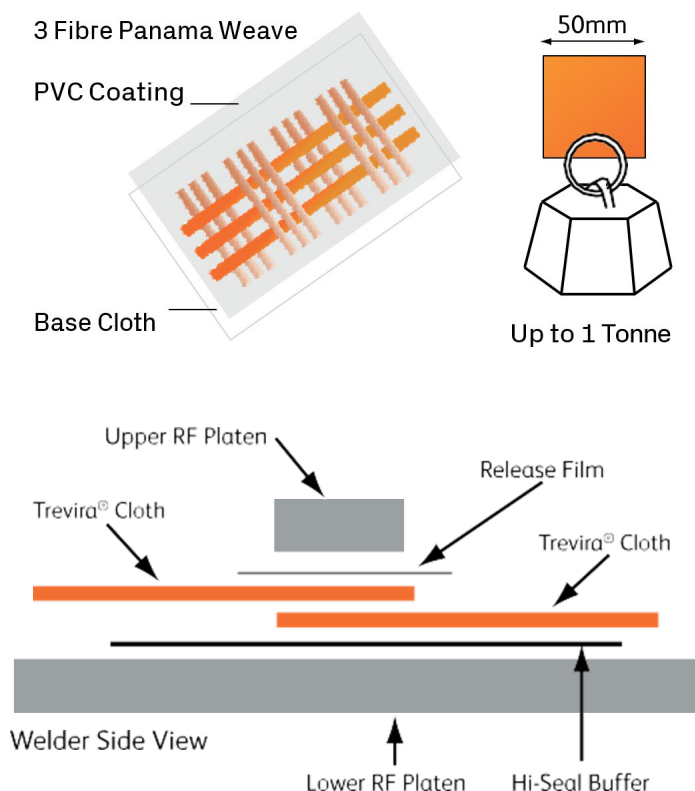
TECHNOLOGY, SERVICE AND SUPPORT

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.



Market sectors served:

- + Oil & Gas
- + Renewable Energy
- + Marine & Shipping
- + Defence & Government Bodies
- + Construction Industry
- + Metals Industry
- + Water Industry
- + Testing Industry
- + Utilities Industry

Customers served:

- + Offshore E&P Majors
- + EPC Offshore Installation Contractors
- + Diving & Salvage Contractors
- + Commercial Marine Contractors
- + Shipyards
- + Ship Owners
- + Navy & Defence
- + Power Plant Operators
- + Testing Service Providers

Application notes showing the ways in which Unique Group's Buoyancy & Load Testing equipment are most commonly used by these customers operating within these market sectors are available upon request.

Compliant. Tested. Proven.

We can provide:

- + Third party test certificates confirming IMCA and LEEA factors of safety on our key products
- + Proof of subsea testing of safety-critical Air Lift Bag inverter lines
- + Evidence of ABS Product Design Assessment for SEAFLEX™ Air Lift Bags and WATER WEIGHTS® bags

Guidance notes to summarise safety implications of above guidelines and how Unique Group is able to prove the full compliance of our Air Lift Bags and WATER WEIGHTS® Bags with these requirements are available.



Get in touch for end to end Subsea Solutions.

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Imagine your possibilities and together let's accomplish them.
Together for a sustainable tomorrow.



Unique Group

Deep Imagination
Leading the way in Subsea Technology & Engineering