



# SYNERGY

INNOVATIVE DIVING EQUIPMENT TRADING LLC

INSPIRING • ENGINEERING • INNOVATION

UAE • UK • INDIA • AZERBAIJAN

## SY-UNDERWATER LIFT BAGS

UNDERWATER LIFT BAGS ENGINEERED FROM THE BOTTOM UP!



INNOVATORS IN BUOYANCY AND ENGINEERED INFLATABLES



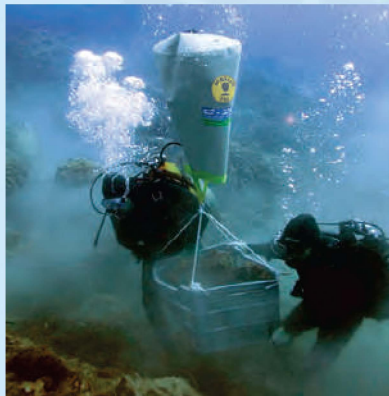


## SY-UNDERWATER LIFT BAGS

### COMMERCIAL LIFT BAGS



Commercial Lift Bag replacing a flange plate at the Atlanta Aquarium.



Commercial Lift Bags lifting artifacts from Sir Captain Morgan's shipwreck.



Commercial Lift Bags being used in the NASA Neutral Buoyancy Lab - International Space Station mock up.

#### Multiple Applications

- Light salvage
- Object recovery
- Underwater construction
- Scientific research

#### Excellent portability

- Fraction of the cost of a barge or crane
- Easy for a single diver to use
- Especially suited for remote locations
- Deployable from small craft

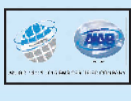
#### Easy to use

- Proprietary SUBSALVE USA Plunger Dump Valve allows air control with a push of a button at the top of the bag and a lanyard at the bottom—vent air from above, beside, or below the lifting bag to achieve desired ascent rate.
- 1/4" NPT inflation port for remote filling, multiple bag manifolding, or to install optional stainless steel quick disconnect.
- Ready for immediate use—factory-equipped with all necessary hardware.

#### Fabric

- Urethane-coated nylon—high-strength and heavy-duty
- Superior abrasion resistance
- Resistant to most petro-chemicals
- UV-resistant
- Low maintenance requirements and easy to clean
- RF welded seam





## SY-UNDERWATER LIFT BAGS

### Lift Straps Designed for Safety

- 6000lb. –load rated high strength resin-treated nylon webbing
- Sewn directly to the bottom of the bag
- Safe working ratio of 6:1

Model	Lift Capacity	Diameter	Overall Height	Packaged Cubic Dimension	Weight
SY-C-100	120lb/55kg	16in/0.41m	30in/0.77m	14inx10inx6in/. 36mx.26mx.15m	5lb/2.27kg
SY-C-200	220lb/100kg	22in/0.56m	36in/0.92m	15inx11inx7in/. 38mx.28mx.18m	7lb/3.18kg
SY-C-500	550lb/250kg	29in/0.74m	43in/1.07m	15inx11inx7in/. 38mx.28mx.18m	12lb/5.45kg

- Each SUBSALVE USA lift bag is tested prior to shipping.
- Custom sizes available.
- All Subsvalve USA products are compliant with IMCA D-016-AIRBAGS, ABS, U.S. Department of Defense Standards.

## SY-UNDERWATER LIFT BAGS

### PROFESSIONAL LIFT BAGS



Professional lift bags used to lift a 100 ton concrete abutment during the Big Dig tunnel construction in Boston.



Raising a 100 ft sailboat using PF-12000's in Bora Bora.



Raising the Spiegel Grove, a 510 ft U.S. Navy troop transport ship.

### Innovative Design

- When the U.S. Navy asked us to develop a flotation device that would dependably withstand particularly abusive conditions, SUBSALVE USA produced the 5-ton Deep Ocean Lift Bag, which has unprecedented strength, low elasticity and superior resistance to abrasion and chemical attack. It became our standard Professional Lift Bag design.

### Multiple Applications

- Our most versatile and easy-to-use, these open-bottom, parachute-shaped lift bags with a single attachment point are essential in construction, heavy and light salvage and many off shore tasks.
- "Inverted water droplet" design facilitates maximum lift capacity with least possible weight, with stress distributed evenly over the fabric surface.
- Equipped with all the necessary hardware and ready for immediate use.
- Each SUBSALVE USA lift bag is tested prior to shipping.

### Fabric

- Urethane-coated nylon—high-strength and heavy-duty
- Superior abrasion resistance
- Resistant to most petro-chemicals
- UV-resistant
- Low maintenance requirements and easy to clean
- RF welded seams





## SY-UNDERWATER LIFT BAGS

### Easy to use

- Proprietary Plunger Dump Valve - air control with push-button at top of bag and lanyard at bottom. Vent air from above, beside or below lift bag to achieve desired ascent rate as well as 1/4" NPT inflation port.
- Below 2 tons
  - Multiple nylon lift straps sewn directly to bottom of lift bag, which bears load and provides safe working ratio of 6:1.
- 2 tons and over
  - Designed with a replaceable heavy-duty nylon webbing lift harness fabricated into the skin of the bag, which bears the load and provides a safe working ratio of 6:1.
- Fitted with a 3/4" NPT inflation port with quick disconnect or cam lock fitting and a 3/4" stainless steel ball valve for rapid deflation.



Model	Lift Capacity	Diameter	Overall Height	Packaged Cubic Dimension	Weight
SY-PF-1000	1100lb/ 500kg	35in/0.90m	56in/ 1.44m	18inx13inx10in/. 46mx.33mx.26m	17lb/7.7kg
SY-PF-2000	2200lb/ 1000kg	48in/1.22m	59in/ 1.50m	20inx15inx9.5in/. 51mx.38mx.29mm	30lb/13.6kg
SY-PF-4000	4400lb/ 2000kg	54in/1.38m	94in/ 2.41m	24inx24inx24in/. 61mx.61mx.61m	50lb/22.7kg
SY-PF-6000	6600lb/ 3000kg	61in/1.56m	108in/ 2.77m	41inx41inx8in/1. 04mx1.04mx.21m	80lb/36.3kg
SY-PF-10000	11000lb/ 5000kg	72in/1.83m	120in/ 3.05m	41inx41inx8in/1. 04mx1.04mx.25m	105lb/47kg
SY-PF-12000	13200lb/ 6000kg	80in/1.79m	130in/ 3.33m	41inx41inx12in/1. 04mx1.04mx.31m	125lb/56.7kg
SY-PF-20000	22000lb/ 10000kg	93in/2.38m	146in/ 4.10m	41inx48inx18in/1. 04mx1.23mx.46m	190lb/86.2kg
SY-PF-40000	44000lb/ 20000kg	120in/3.07m	201in/ 6.16m	41inx48inx24in/1. 04mx1.23mx.62m	325lb/147.7kg
SY-PF-70000	77000lb/ 35000kg	144in/3.69m	258in/ 6.77m	41inx48inx38in/1. 04mx1.23mx.97m	410lb/186.9kg
SY-PF-100000	110000lb/ 50000kg	166in/4.22m	316in/ 8.03m	40inx50inx54in/1. 02mx1.27mx1.37m	525lb/238kg

- Each SUBSALVE USA lift bag is tested prior to shipping.
- Custom sizes available.
- All Subsvalve USA products are compliant with IMCA D-016-AIRBAGS, ABS, U.S. Department of Defense Standards.

## SY-UNDERWATER LIFT BAGS

### PROFESSIONAL ENCLOSED LIFT BAGS



#### Multiple Applications

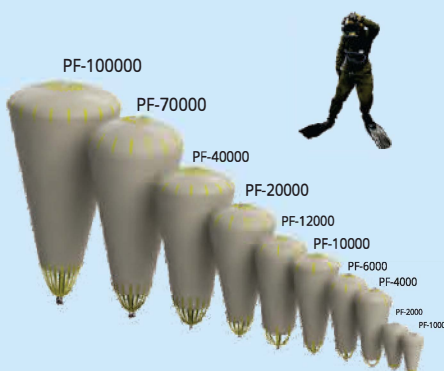
- Versatile and easy-to-use, these enclosed-bottom, parachute-shaped lift bags with a single attachment point are essential in construction, heavy and light salvage and many off shore tasks.
- "Inverted water droplet" design facilitates maximum lift capacity with least possible weight, with stress distributed evenly over the fabric surface.
- Able to be pre-inflated when necessary
- Will not dump air if the bag breaks the surface of the water
- Pressure relief valves at the bottom of the bag avoid over pressurization of the lift bag
- Equipped with all the necessary hardware and ready for immediate use

#### Fabric

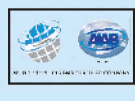
- Urethane-coated nylon—high-strength and heavy-duty
- Superior abrasion resistance
- Resistant to most petro-chemicals
- UV-resistant
- Low maintenance requirements and easy to clean
- RF welded seams

#### Easy to use

- Below 2 tons
  - Multiple nylon lift straps sewn directly to bottom of lift bag, which bears load and provides safe working ratio of 6:1.
  - Fitted with a 3/4" NPT inflation port with quick disconnect or cam lock fitting and a 3/4" stainless steel ball valve for rapid deflation.
- 2 tons and over
  - Designed with a replaceable heavy-duty nylon webbing lift harness fabricated into the skin of the bag, which bears the load and provides a safe working ratio of 6:1.
  - Fitted with a 3/4" NPT inflation port with quick disconnect or cam lock fitting and a 3/4" stainless steel ball valve for rapid deflation







## SY-UNDERWATER LIFT BAGS

Model	Lift Capacity	Diameter	Overall Height	Packaged Cubic Dimension	Weight
SY-PF-1000	1100lb/ 500kg	35in/0.90m	56in/ 1.44m	18inx13inx10in/. 46mx.33mx.26m	17lb/7.7kg
SY-PF-2000	2200lb/ 1000kg	48in/1.22m	59in/ 1.50m	20inx15inx9.5in/. 51mx.38mx.29mm	30lb/13.6kg
SY-PF-4000	4400lb/ 2000kg	54in/1.38m	94in/ 2.41m	24inx24inx24in/. 61mx.61mx.61m	50lb/22.7kg
SY-PF-6000	6600lb/ 3000kg	61in/1.56m	108in/ 2.77m	41inx41inx8in/1. 04mx1.04mx.21m	80lb/36.3kg
SY-PF-10000	11000lb/ 5000kg	72in/1.83m	120in/ 3.05m	41inx41inx8in/1. 04mx1.04mx.25m	105lb/47kg
SY-PF-12000	13200lb/ 6000kg	80in/1.79m	130in/ 3.33m	41inx41inx12in/1. 04mx1.04mx.31m	125lb/56.7kg
SY-PF-20000	22000lb/ 10000kg	93in/2.38m	146in/ 4.10m	41inx48inx18in/1. 04mx1.23mx.46m	190lb/86.2kg
SY-PF-40000	44000lb/ 20000kg	120in/3.07m	201in/ 6.16m	41inx48inx24in/1. 04mx1.23mx.62m	325lb/147.7kg
SY-PF-70000	77000lb/ 35000kg	144in/3.69m	258in/ 6.77m	41inx48inx38in/1. 04mx1.23mx.97m	410lb/186.9kg
SY-PF-100000	110000lb/ 50000kg	166in/4.22m	316in/ 8.03m	40inx50inx54in/1. 02mx1.27mx1.37m	525lb/238kg

Each SUBSALVE USA lift bag is tested prior to shipping.

- Custom sizes available.
- All Subsalue USA products are compliant with IMCA D-016-AIRBAGS, ABS, U.S. Department of Defense Standards.

## SY-UNDERWATER LIFT BAGS

### ENCLOSED FLOTATION BAGS



When you need to float an object close to the surface, use SUBSALVE's "pillow" shaped

Enclosed Flotation Bags in any position—upright or flat, outside or inside of structures—

for vessel salvage, auto recovery, pipeline and cable installation and emergency flotation

for ships, aircraft, submersibles and ROVs.

#### Adaptive

- Configure a multitude of rigging combinations.
- Use with a single pick point (shackle supplied on the bottom of the bag).
- Invert to use the multiple stainless steel rings on the top of the bag.

#### Fabric

- Urethane-coated nylon—high-strength and heavy-duty
- Superior abrasion resistance
- Resistant to most petro-chemicals
- UV-resistant
- Low maintenance requirements and easy to clean
- RF welded seams

#### Lifting Harness

- Heavy nylon lift harness built into the body of the lift bag
- Safe working ratio of 6:1

Safe and easy to use

- Equipped with all necessary hardware—ready for immediate use
- 3/4" NPT inflation/deflation port equipped with ball valve
- Stainless steel quick disconnect for inflation
- Pressure relief valves: set to release at 2.5 psi above ambient pressure
- Enough pressure relief valves are installed in each bag to allow expanding to vent should a free ascent occur.



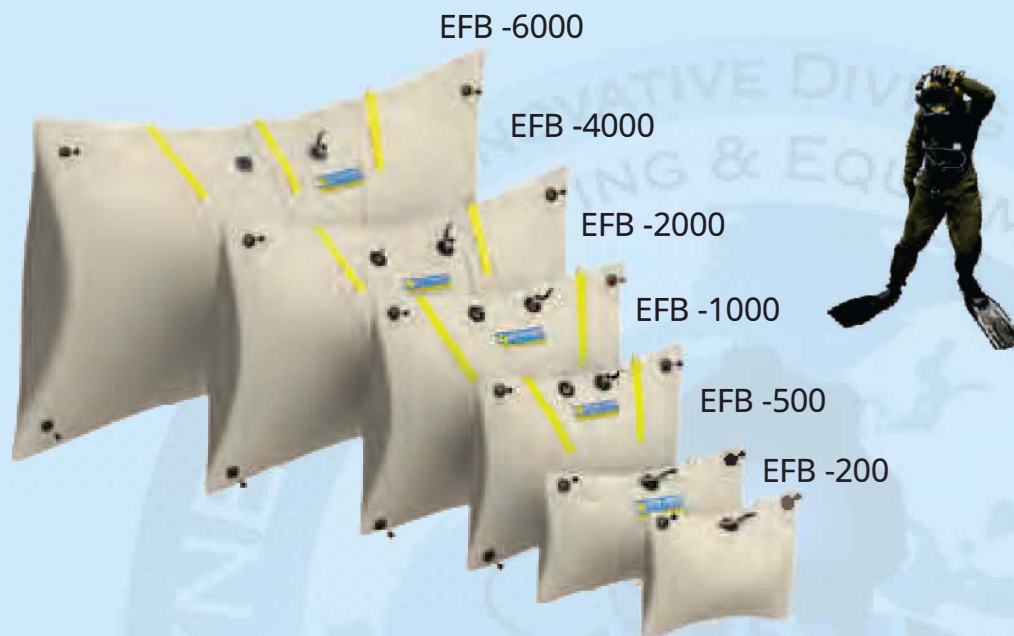
Recovery of truck that fell through the ice.  
Timber Bay Scuba - Wisconsin, USA.



B-2000's used for the James Cameron's Deepsea Challenger mission to the bottom of the Mariana Trench.



## SY-UNDERWATER LIFT BAGS



Model	Lift Capacity	Height	Length	Packaged Cubic Dimension	Weight	Attachment Points
SY-EFB-200	220lb 100kg	29in .74m	38in .97m	15inx11inx7in .38mx.28mx.18m	12lb 5.4kg	1bottom
SY-EFB-500	550lb 250kg	32in .82m	51in 1.31m	17inx12inx8in 44mx.31mx.21m	20lb 9.1kg	2top 1bottom
SY-EFB-1000	1100lb 500kg	44in 1.13m	51in 1.31m	18inx13inx10in .46mx.33mx.26m	32lb 14.5kg	2top 1bottom
SY-EFB-2000	2200lb 1000kg	55in 1.41m	60in 1.54m	20inx15inx9.5in .51mx.38mx.24m	50lb 22.7kg	2top 1bottom
SY-EFB-4000	4400lb 2000kg	69in 1.77m	75in 1.92m	22inx15inx13in .56mx.38mx.33m	70lb 31.7kg	2top 1bottom
SY-EFB-6000	6600lb 3000kg	76in 1.94m	112in 2.87m	26inx18inx13in .57mx.45mx.33m	90lb 40.8kg	3top 1bottom

- Each SUBSALVE USA lift bag is tested prior to shipping.
- Custom sizes available.
- All Subsalsve USA products are compliant with IMCA D-016-AIRBAGS, ABS, U.S. Department of Defense Standards.

## SY-UNDERWATER LIFT BAGS

### ENCLOSED SHALLOW WATER FLOTATION BAGS



When you need to float an object in extremely shallow water use SUBSALVE's shallow water "pillow" shaped Enclosed Flotation Bags (also referred to as boulder bags). Utilize them in any position - upright or flat, outside or inside of structures—for vessel salvage, auto recovery, pipeline and cable installation and emergency flotation for ships, aircraft, submersibles and ROVs.

#### Adaptive

- Configure with a multitude of rigging combinations.
- Use with a single or multiple attachment points around the perimeter of the bag.



#### Fabric

- Urethane-coated nylon—high-strength and heavy-duty
- Superior abrasion resistance
- Resistant to most petro-chemicals
- UV-resistant
- Low maintenance requirements and easy to clean
- RF welded seams



#### Lifting Harness

- Heavy nylon lift harness built into the body of the lift bag
- Safe working ratio of 6:1

#### Safe and easy to use

- Equipped with all necessary hardware—ready for immediate use
- 3/4" NPT inflation/deflation port equipped with ball valve
- Stainless steel quick disconnect for inflation
- Pressure relief valves: set to release at 2.5 psi above ambient pressure
- Enough pressure relief valves are installed in each bag to allow expanding to vent should a free ascent occur.







## SY-UNDERWATER LIFT BAGS

Model	Lift Capacity	Height	Length	Packaged Cubic Dimension	Weight
SY-EFB-200-SW	220lb/ 100kg	29in/ 74m	38in/ 97m	15inx11inx7in. 38mx.28mx.18m	12lb/5.4kg
SY-EFB-500-SW	550lb/ 250kg	32in/ 82m	51in/ 1.31m	17inx12inx8in 44mx.31mx.21m	20lb/9.1kg
SY-EFB-1000-SW	1100lb/ 500kg	44in/ 1.13m	51in/ 1.31m.	18inx13inx10in .46mx.33mx.26m	32lb/14.5kg
SY-EFB-2000-SW	2200lb/ 1000kg	55in/ 1.41m	60in/ 1.54m	20inx15inx9.5in 51mx.38mx.24m	50lb/22.7kg
SY-EFB-4000-SW	4400lb/ 2000kg	69in/ 1.77m	75in/ 1.92m	22inx15inx13in .56mx.38mx.33m	70lb/31.7kg
SY-EFB-6000-SW	6600lb/ 3000kg	76in/ 1.94m	112in/ 2.87m	26inx18inx13in .57mx.45mx.33m	90lb/40.8kg

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## SY-UNDERWATER LIFT BAGS

### SALVAGE PONTOONS



SP-70000's raising the Russian K-77 submarine.



SP-70000's and SP-40000's used to reduce the draft of a newly constructed tugboat during launch. Photo Credit: Ocean, Quebec, Canada



SP-6000's used to support a pipeline during installation.

Totally-enclosed, cylindrical bags are ideal for shallow water salvage, reducing the draft of a vessel or raising an object closer to the surface. They are invaluable in cable and pipeline operations and where long tows are planned.

#### Fabric

- Urethane-coated nylon—high-strength and heavy-duty
- Superior abrasion resistance
- Resistant to most petro-chemicals
- UV-resistant
- Low maintenance requirements and easy to clean
- RF welded seams

#### Fittings

- Replaceable, heavy-duty nylon webbing lift harness is built into the body of the lift bag, with a safe working ratio of 6:1
- The harness maintains the lift bag in a horizontal position while insuring maximum stability
- Equipped with shackles, valves and all necessary hardware for immediate use
- 3/4" NPT inflation port with 3/4" stainless steel ball valves for inflation and deflation
- Stainless steel quick disconnect for inflation
- Pressure relief valves set to release at 2.5psi above ambient pressure

Available in both standard cylinder and elongated tubes

**CAUTION:** Salvage Pontoons have multiple attachment points. All attachment points must be connected with the shackles provided, and the load evenly distributed. Large pontoons may require a separate lifting beam to evenly distribute the load.



## SY-UNDERWATER LIFT BAGS

SP-70000

SP-40000

SP-20000

SP-12000

SP-6000

SP-4000

SP-2000

SP-1000



Model	Lift Capacity	Height	Length	Packaged Cubic Dimension	Weight	Attachment Points
SY-SP-1000	1100lb/ 500kg	28in .72m	48in 1.23m	20inx15inx9.5in .51mx.38mx.2m	30lb 13kg	2
SY-SP-2000	2200lb/ 1000kg	42in 1.13m	52in 1.23m	22inx15inx13in .56mx.38mx.33m	50lb 23kg	2
SY-SP-4000	4400lb/ 2000kg	44in 1.13m	78in 2.05m	26inx18inx13in .67mx.46mx.33m	80lb 36kg	2
SY-SP-6000	6600lb/ 3000kg	53in 1.36m	68in 2.05m	41inx41inx12in 1.05mx1.05mx.31m	97lb 44kg	2
SY-SP-12000	12200lb 5500kg	64in 1.54m	120in 3.10m	41inx41inx18in 1.05mx1.05mx.46m	140lb 64kg	4
SY-SP-20000	22000lb 10000kg	69in 1.77m	162in 4.15m	41inx48inx24in 1.05mx1.23mx.62m	190lb 86kg	4
SY-SP-40000	44000lb 20000kg	92in 2.36m	181in 4.64m	41inx48inx38in 1.05mx1.23mx.97m17	325lb 173kg	5
SY-SP-70000	77000lb 35000kg	115in 3.08m	207in 4.77m	41inx48inx48in 1.05mx1.23mx1.23m	425lb 193kg	7

- Each SUBSALVE USA lift bag is tested prior to shipping.
- Custom sizes available.
- All Subsvalve USA products are compliant with IMCA D-016-AIRBAGS, ABS, U.S. Department of Defense Standards.

## SY-UNDERWATER LIFT BAGS

### SALVAGE PONTOONS - VERTICAL



Totally-enclosed, cylindrical bags are ideal for shallow water salvage, reducing the draft of a vessel or raising an object closer to the surface. They are invaluable in cable and pipeline operations. These bags are rigged with a single bottom and top pick point with internal strap to allow for the load to be lifted from the top of the bag.

#### Fabric

- Urethane-coated nylon—high-strength and heavy-duty
- Superior abrasion resistance
- Resistant to most petro-chemicals
- UV-resistant
- Low maintenance requirements and easy to clean
- RF welded seams

#### Fittings

- Replaceable, heavy-duty nylon webbing lift harness is built into the body of the lift bag, with a safe working ratio of 6:1
- The harness maintains the lift bag in a vertical position while insuring maximum stability
- Equipped with shackles, valves and all necessary hardware for immediate use
- Two 3/4" NPT inflation ports with 3/4" stainless steel ball valves for inflation and deflation
- Pressure relief valves set to release at 2.5psi above ambient pressure



SPV-10000

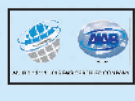
SPV-6000

SPV-4000

SPV-2000







## SY-UNDERWATER LIFT BAGS

Model	Lift Capacity	Diameter	Height	Packaged Cubic Dimension	Weight
SY-SPV-2000	2200lb/ 1000kg	38in/0.97m	56in/1.42m	22inx15inx13in/. 56mx.38mx.33m5	50lb/23kg
SY-SPV-4000	4400lb/ 2000kg	48in/1.22m	66in/1.68m	26inx18inx13in/. 67mx.46mx.33m	80lb/36kg
SY-SPV-6000	6600lb/ 3000kg	59in/1.5m	82in/2.08m	41inx41inx12in/1. 05mx1.05mx.31m	97lb/44kg
SY-SPV-10000	11000lb/ 5000kg	65in/1.65m	105in/2.67m	41inx41inx16in/1. 05mx1.05mx.41m	130lb/59kg

- Each SUBSALVE USA lift bag is tested prior to shipping.
- Custom sizes available.
- All Subsalue USA products are compliant with IMCA D-016-AIRBAGS, ABS, U.S. Department of Defense Standards.

## SY-UNDERWATER LIFT BAGS

### CABLE FLOAT/PIPELINE FLOATS

Cable/Pipeline Float - Salvage Float Balloon

- Includes 3 stainless steel lift rings and inflation port.
- Used for light salvage as well as cable flotation and suspension
- Part No. SFB-300 - Manufactured to US Military specification NSN 2050-00-574-7963

and in accordance to dwg. No. 4563094



Model	Lift Capacity	Inflated Diameter	Packaged Cubic Dimension	Weight
SY-SFB-100	110lb/ 50kg	22in/0.56m	15inx11inx7in/. 38mx.28mx.18m	6lb/2.7kg
SY-SFB-200	220lb/ 100kg	27in/0.69m	15inx11inx7in/. 38mx.28mx.18m	8lb/3.6k
SY-SFB-300	330lb/ 150kg	30in/0.76m	18inx13inx10in/. 46mx.33mx.25m	10lb/4.5kg
SY-SFB-500	550lb/ 250kg	34in/0.86m	24inx18inx10in/. 61mx.46mx.25m	12lb/5.4kg

### PROPELLER BAGS

#### Prop bag

- Specially designed lift bags used to remove and install boat propellers.
- Available in three standard sizes (100lb, 200lb, 300lb), custom sizes available.
- Each lift bag has 4 lift points and one dump valve with lanyard for manual operation.



Model	Lift Capacity	Length	Weight	Height	Packaged Cubic Dimension	Weight
SY-PB-100	110lb/ 50kg	28in .71m	9in .23m	14in .36m	15inx11inx7in .38mx.28mx.18m	6lb/ 2.7kg
SY-PB-200	220lb/ 100kg	36in .91m	12in .31m	18in .46m	18inx13inx10in 46mx.33mx.25m	8lb/ 3.6k
SY-PB-300	330lb/ 150kg	48in 1.22m	16in .41m	24in .61m	24inx18inx10in .61mx.46mx.25m	10lb/ 4.5kg

## SY-UNDERWATER LIFT BAGS

### BRS-100



Specially designed for use by law enforcement to recover or remove explosives or other dangerous devices.

- The Bomb Recovery System 100 includes the following.
- One 25lb fl oat
- One 50b fl oat
- One 100lb fl oat
- Each fl oat includes one 2.5psi pressure relief valve and a 1/4in quick disconnect for infl ation.
- 100ft LP infl ation hose with quick disconnects
- 105ft high strength polypro line with carabiner
- Carry b ag

- Each SUBSALVE USA lift bag is tested prior to shipping.
- Custom sizes available.
- All Subsvalve USA products are compliant with IMCA D-016-AIRBAGS, ABS, U.S. Department of Defense St andards.



## SY-UNDERWATER LIFT BAGS

### WATER LOAD TEST BAG



#### Innovative Design

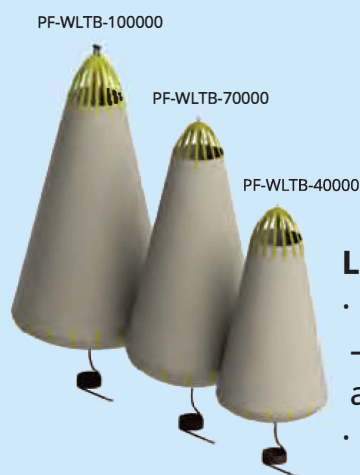
- SUBSALVE USA's Water Load Test Bags are constructed using the same technology used in our world class lift bags. These bags makes it easier to load test structures due to their very low handling weight and make it possible to test in areas with insufficient access for conventional solid weights.
- Equipped with all the necessary hardware and ready for immediate use

#### Fabric

- Urethane-coated nylon—high-strength and heavy-duty
- Superior abrasion resistance
- Resistant to most petro-chemicals
- UV-resistant
- Low maintenance requirements and easy to clean
- RF welded seams

#### Easy to use

- PF-WLTB-1000 – PF-WLTB-6000  
1 1/4 in NPT port accepts a 1 1/4in discharge hose for fast deflation.
- PF-WLTB-10000 – PF-WLTB-20000  
2in NPT stainless steel flange accepts a 2in discharge hose for fast deflation.
- PF-WLTB-40000 – PF-WLTB-70000  
3in NPT stainless steel flange accepts a 3in discharge hose for fast deflation of the larger water weight test bags.
- PF-WLTB-100000  
4in NPT stainless steel flange accepts a 4in discharge hose for fast deflation of the larger water weight test bags.



#### Lift Straps

- Below PF-WLTB-4000
  - Multiple nylon lift straps sewn directly to bottom of lift bag, which bears load and provides safe working ratio of 6:1.
- PF-WLTB-4000 and above
  - Designed with a replaceable heavy-duty nylon webbing lift harness fabricated into the skin of the bag, which bears the load and provides a safe working ratio of 6:1.

## SY-UNDERWATER LIFT BAGS



Model	Lift Capacity	Diameter	Overall Height	Packaged Cubic Dimension	Weight
SY-WLTB-1000	1100lb/ 500kg	35in/0.90m	56in/ 1.44m	18inx13inx10in/. 46mx.33mx.26m	17lb/7.7kg
SY-WLTB-2000	2200lb/ 1000kg	48in/1.22m	59in/ 1.50m	20inx15inx9.5in/. 51mx.38mx.29mm	30lb/13.6kg
SY-WLTB-4000	4400lb/ 2000kg	54in/1.38m	94in/ 2.41m	24inx24inx24in/. 61mx.61mx.61m	50lb/22.7kg
SY-WLTB-6000	6600lb/ 3000kg	61in/1.56m	108in/ 2.77m	41inx41inx8in/1. 04mx1.04mx.21m	80lb/36.3kg
SY-WLTB-10000	11000lb/ 5000kg	72in/1.83m	120in/ 3.05m	41inx41inx8in/1. 04mx1.04mx.25m	105lb/47kg
SY-WLTB-12000	13200lb/ 6000kg	80in/1.79m	130in/ 3.33m	41inx41inx12in/1. 04mx1.04mx.31m	125lb/56.7kg
SY-WLTB-20000	22000lb/ 10000kg	93in/2.38m	146in/ 4.10m	41inx48inx18in/1. 04mx1.23mx.46m	190lb/86.2kg
SY-WLTB-40000	44000lb/ 20000kg	120in/3.07m	201in/ 6.16m	41inx48inx24in/1. 04mx1.23mx.62m	325lb/147.7kg
SY-WLTB-70000	77000lb/ 35000kg	144in/3.69m	258in/ 6.77m	41inx48inx38in/1. 04mx1.23mx.97m	410lb/186.9kg
SY-WLTB-100000	110000lb/ 50000kg	166in/4.22m	316in/ 8.03m	40inx50inx54in/1. 02mx1.27mx1.37m	525lb/238kg

- Each SUBSALVE USA lift bag is tested prior to shipping.
- Custom sizes available.
- All Subsolve USA products are compliant with IMCA D-016-AIRBAGS, ABS, U.S. Department of Defense Standards.

## SY-UNDERWATER LIFT BAGS

### PIPE PLUGGERS

Nothing temporarily closes a cavity or seals an opening better than an inflatable plug.

PIPE PLUGGERS are heavy duty, inflatable pipe plugs especially designed for use during the construction, maintenance, and repair of pipeline, ducts, and tunnels. PIPE PLUGGERS are constructed

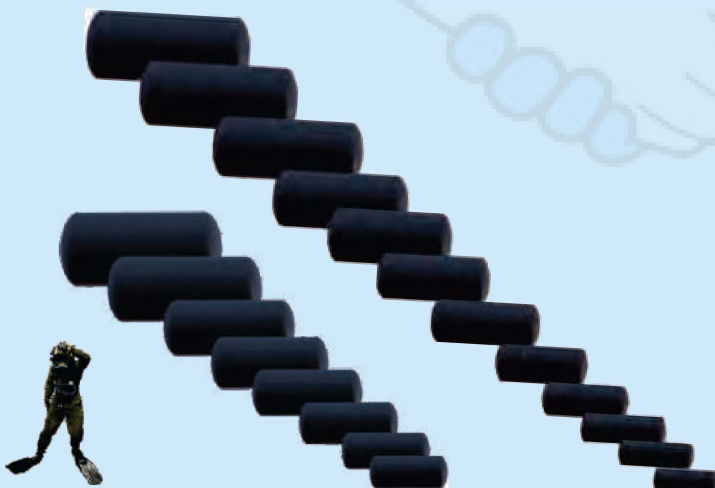
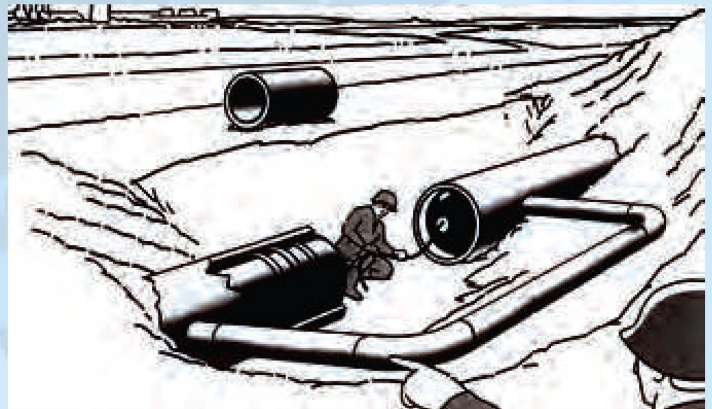
of high tenacity, urethane coated nylon fabric for high strength of over 1000lbs. per inch,

and the urethane coating is resistant to fuel and most other petro-chemicals. Each PIPE

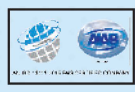
PLUGGER is equipped with rigging hardware, 1/4" to 3/4" inflation ports, and pressure

relief valves to prevent blow ups. PIPE PLUGGERS are also available with a by-pass design. Stock sizes are available from 12" to 96" diameter. Custom sizes, shapes, and

configurations can be designed and manufactured to meet special needs.







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## SY-UNDERWATER LIFT BAGS

Pipe Dia.	Max. Press.	Max. Head	Thrustat MaximumHead		Volume	Disp.	Length	Weight	Valve
in	psig	ft	psi	tons	ft3	lb	in	lb	in
12	23	52	22	1.3	2.22	138	32	12	Stem
14	23	52	22	1.9	3.9	243	40	15	0.75
16	23	52	22	2.3	5.24	327	44	20	0.75
18	23	52	22	2.9	6.18	386	46	25	0.75
20	22	50	21	3.5	8.2	512	49	28	0.75
22	22	50	21	4	9.9	624	58	33	0.75
24	20	45	19	4.5	13.6	848	60	40	0.75
28	19	43	18	5	18.92	1179	66	44	0.75
30	17	39	17	6	25.42	1584	72	50	0.75
32	16	35	15.2	6.5	30.5	1915	80	55	0.75
34	15	34	14.5	7	31.42	1980	84	57	0.75
36	15	34	14.5	7.5	35.37	2208	87	65	0.75
42	13	30	13	9	65.87	4105	101	96	0.75
48	11	25	11	10	96.48	6021	114	140	0.75
54	9	210	9	10.5	135.42	8448	128	160	0.75
60	8	19	8.5	12	192.08	11987	142	190	0.75
66	7	16	7	12.3	253.66	15850	152	255	0.75
72	6	14	6.2	13	338.8	20085	170	270	0.75
84	6	14	6.2	17	555.1	34500	200	280	0.75
96	5	12	5	20	796.25	49650	210	378	0.75

## SY-UNDERWATER LIFT BAGS

### PHOTO GALLERY



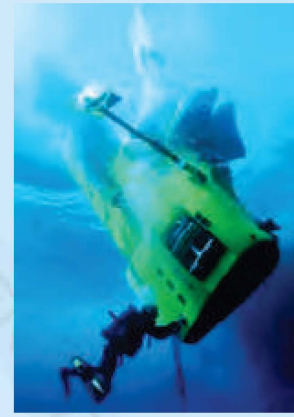
Draft reduction for newly constructed tugboat launching using Salvage Pontoons 40,000 lbs. and Salvage Pontoons 70,000 lbs.



Custom Vertical Pontoons manufactured to allow accurate horizontal control during large pipe and valve maintenance and assembly



Professional 4,000 lbs. Lift Bags raising 5 ton marble column sections from a 200 BC Roman shipwreck off of Turkey



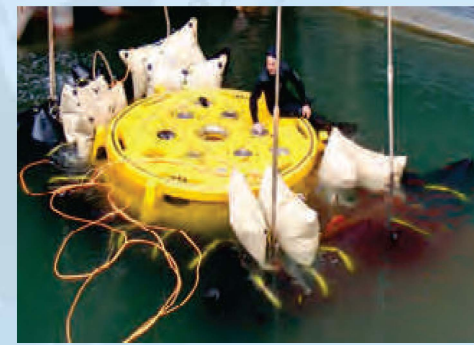
Divers re-rigging Enclosed Flotation Bags 2,000 lbs. on James Cameron's Deepsea Challenger.



Enclosed Flotation Bags 6,000 lbs. used as pneumatic jacks/skids to remove and re-launch a grounded crewboat.



Raising Wayne Newton's yacht with Professional Lift Bags 12,000 lbs. and Enclosed Flotation Bags 6,000 lbs. Metropolitan Marine Solutions, Arizona, USA.



Lowering instrumentation using Enclosed Flotation Bags 500 lbs. and Enclosed Flotation Bags 6,000 lbs.



Salvage Pontoons 4,000 lbs. being used on an ocean wave energy system.



Fend Air Inflatable Marine Fenders on custom motor yacht.



Shallow water wreck removal using clusters of Enclosed Flotation Bags 2,000 lbs.



## SY-UNDERWATER LIFT BAGS



Roof load testing using Enclosed Water Load Test Bags.



Installation of oil pipeline in the Middle East using Salvage Pontoons 6,000 lbs.



Small aircraft salvage using Enclosed Flotation Bags 2,000 lbs.



Yacht salvage using Salvage Pontoons 2,000 lbs. and Salvage Pontoons 20,000 lbs. Photo credit: Vessel Assist - San Diego.



## SYNERGY INFRASTRUCTURE







# SYNERGY

INNOVATIVE DIVING EQUIPMENT TRADING LLC

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## SY-UNDERWATER LIFT BAGS

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