

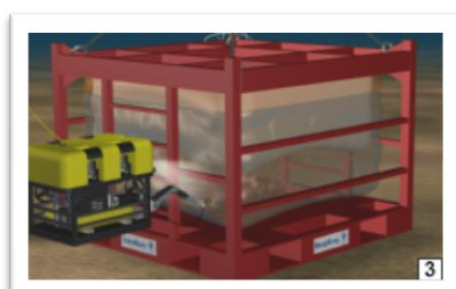
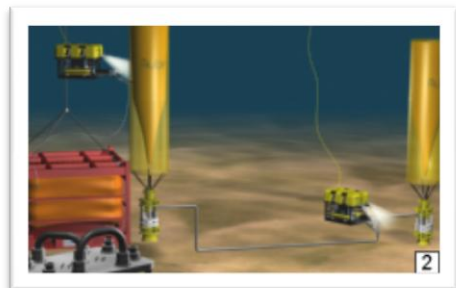
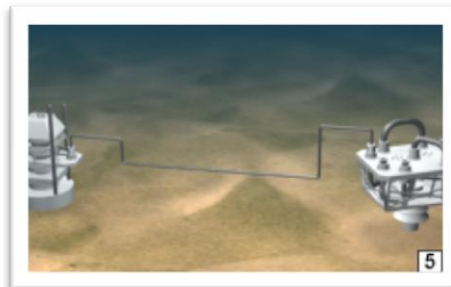
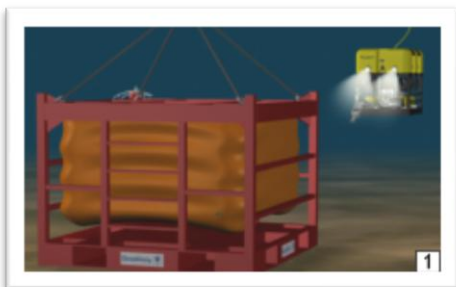


Enabling technology for variable buoyancy

DeepBuoy is a patented low density fluid that when pumped into vessels subsea will impart buoyancy to structures under water. It enables a new approach to variable buoyancy.

DeepBuoy has the following features:

- A remarkably low density (550kgs / m³) giving almost pound for pound lift
- Virtual incompressibility resulting in no change in buoyancy with changes in depth
- A capability to operate at depths of up to 3000 metres/9800 feet
- A pumpable fluid enabling buoyancy to be added and removed subsea
- Non-hazardous and environmentally responsible



Construction support example:

1. Tank containing DeepBuoy is lowered to seabed. ROV moves into position.
2. The spool piece and the buoyancy bags descend to the seabed with the second ROV. ROV fits line to the buoyancy bag.
3. ROV pumps seawater into the outer bag and squeezes the inner bag displacing DeepBuoy.
4. The buoyancy bag rises and lifts the spool piece as DeepBuoy is pumped in. ROV can adjust the buoyancy level by displacing DeepBuoy with seawater to fit the spool piece.
5. By repeating the same process, ROV fits the other end of the spool piece.



Aubin and Ecosse Subsea Systems

PARTNERS TO PROVIDE DEEPBUOY CHEMICALS AND SUBSEA ENGINEERING EXPERTISE

DeepBuoy – Enabling Technology for Variable Buoyancy

- Stable and incompressible buoyancy in up to 3000m/9800ft
- Capable of lifting and lowering large heavy structures from seabed to near surface
- Suitable for installation surface to seabed of christmas trees, manifolds, spoolpieces
- Controllable lift for ROV construction work, e.g. spoolpiece connections
- Extends depth and lift capabilities of cranes, winches and drill strings
- No special heavy lift mobilisation required
- Once load is subsurface, the operation is less weather-dependent
- For many subsea tasks, using DeepBuoy is more cost effective than using a conventional crane/drill string

Flexible contracting options - from turnkey solution to gel hire plus engineering support.

For further details on DeepBuoy:

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