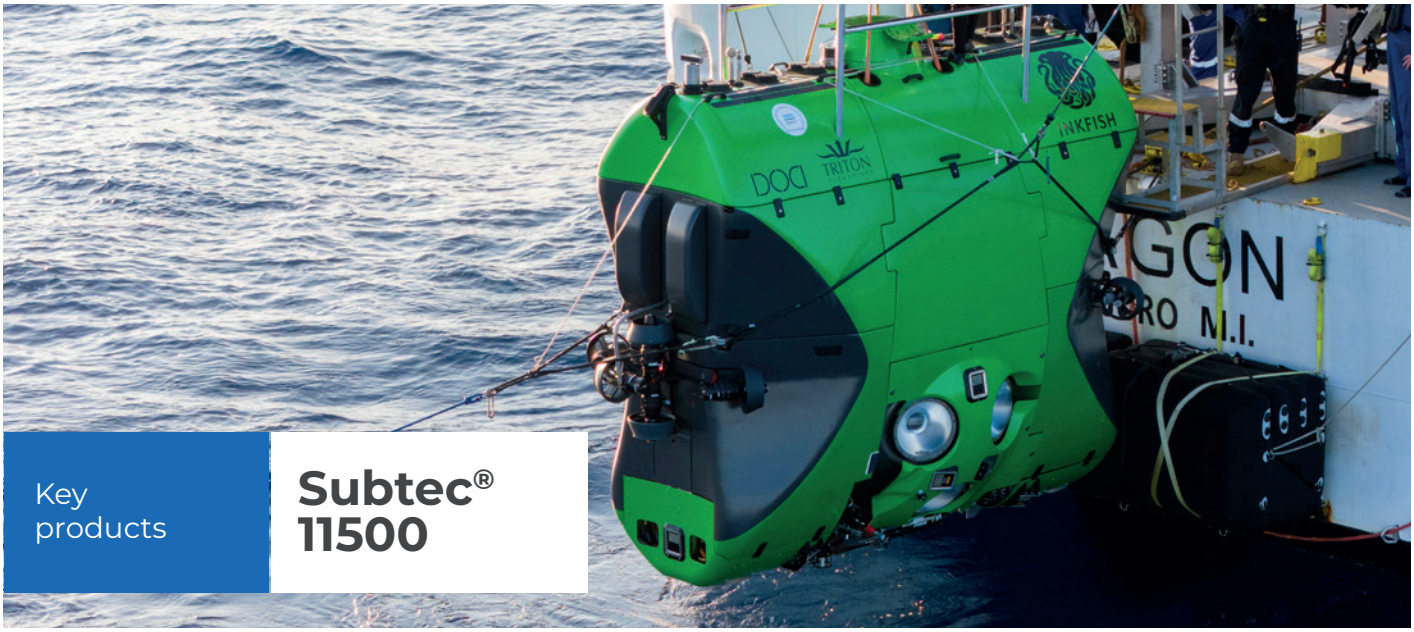
Maintaining DSV Bakunawa – Inkfish's Full Ocean Depth Submersible

A partnership that advances oceanic preservation and exploration.



Key products

Subtec® 11500

Challenge

As a world-renowned oceanic exploration organisation that supports marine research, Inkfish are the owners and operators of the DSV Bakunawa (formerly 'DSV Limiting Factor'), a two-man, 12-tonne vessel, that was previously used for The Five Deeps Expedition, the first successful manned descent to the deepest point of all five of the world's oceans.

The DSV Bakunawa is one of only a handful of manned submersibles capable of reaching the Challenger Deep, the deepest point of the seabed, approx. 10,925 m (35,843 ft) below sea level.

A truly unique submersible, the DSV Bakunawa is one of only a handful of submersibles that are DNV certified for extensive and repeated dives at full ocean depth for oceanographic exploration. Therefore, in replacing its current buoyancy system, it was essential that Inkfish had a partner that could provide DNV approved buoyancy materials.

Solution

The proposed buoyancy system will be manufactured from Base Material's DNV type approved Subtec® 11500, a low-density high-performance syntactic foam buoyancy material, which is qualified for use in seawater depths down to 11,500 metres.

Base Materials is the first syntactic foam subsea buoyancy manufacturer to receive DNV type approval on its Subtec® 11500 material, and DNV Approval of Manufacture for its complete range of Subtec® materials.

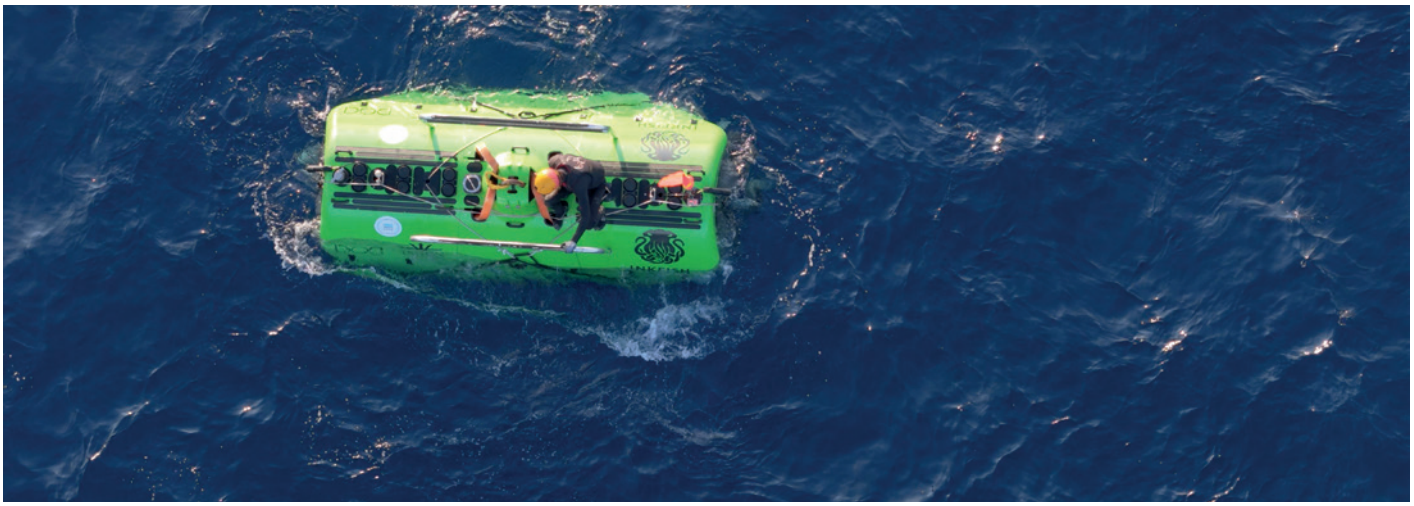
By obtaining DNV certification, Base Materials is demonstrating its commitment to adhering to best practices and rigorous standards, which enhances both the reliability and safety of its subsea buoyancy solutions.

About DNV

Widely recognised as one of the world's leading classification societies, DNV is a global independent classification body that delivers testing, certification, and technical advisory services to the maritime industry.

About Subtec®

With densities from 400 – 650 Kg/m^3 and grades to suit a range of seawater depths from 2,000 metres to 11,500 metres, Base Materials' DNV approved Subtec® buoyancy materials comprise high-grade hollow glass microspheres and a novel thermoset polymer matrix, producing ultra-high strength-to-weight characteristics with excellent water ingress resistance.



"In a world where the depths of our oceans remain largely uncharted, we are immensely proud to partner with Inkfish, an exceptional conservation organisation dedicated to unlocking the mysteries of oceans across the globe.

Playing an active role in the advancement of global oceanic preservation and exploration is a significant achievement for Base Materials."

JOHN MILLER
Managing Director at Base Materials