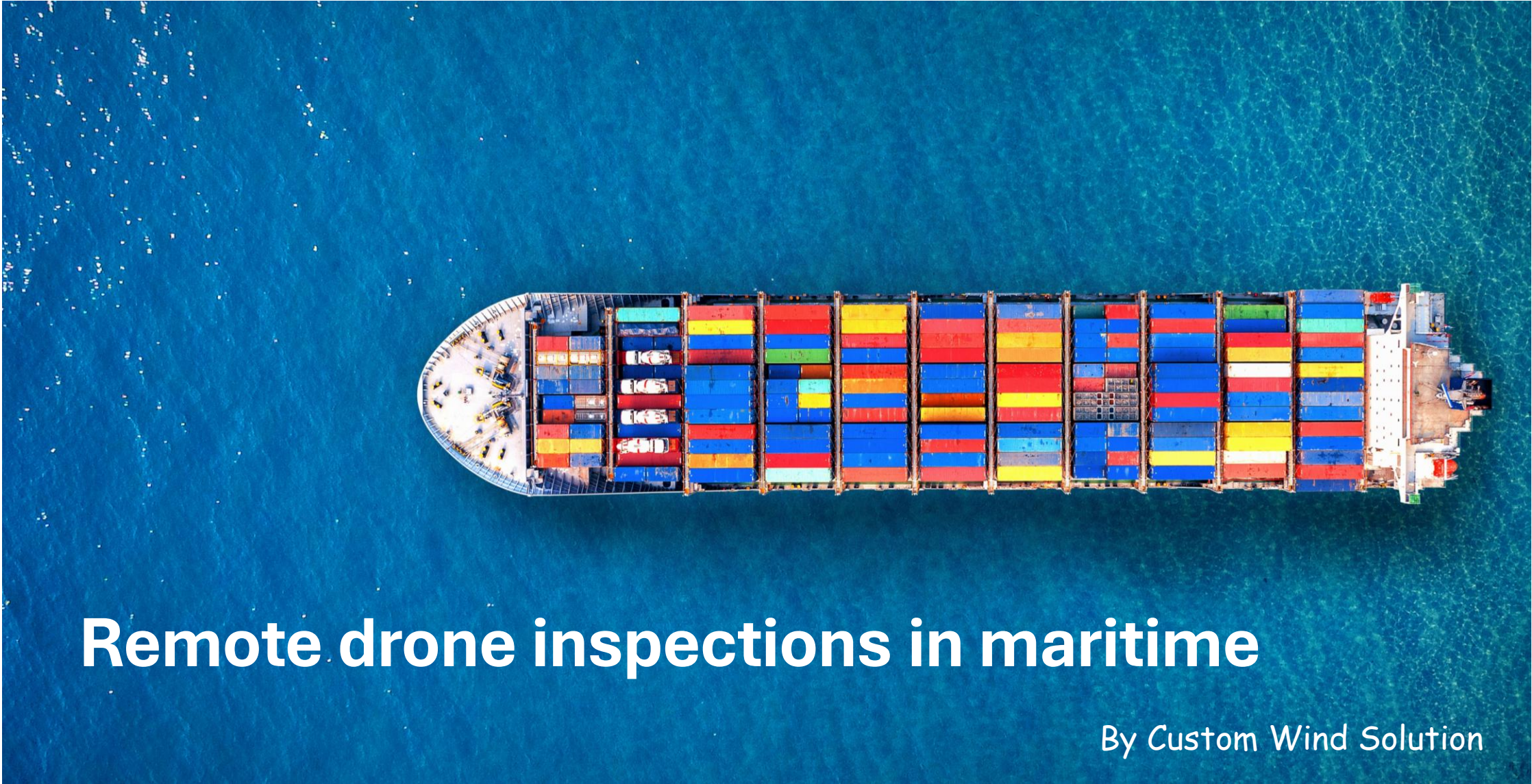
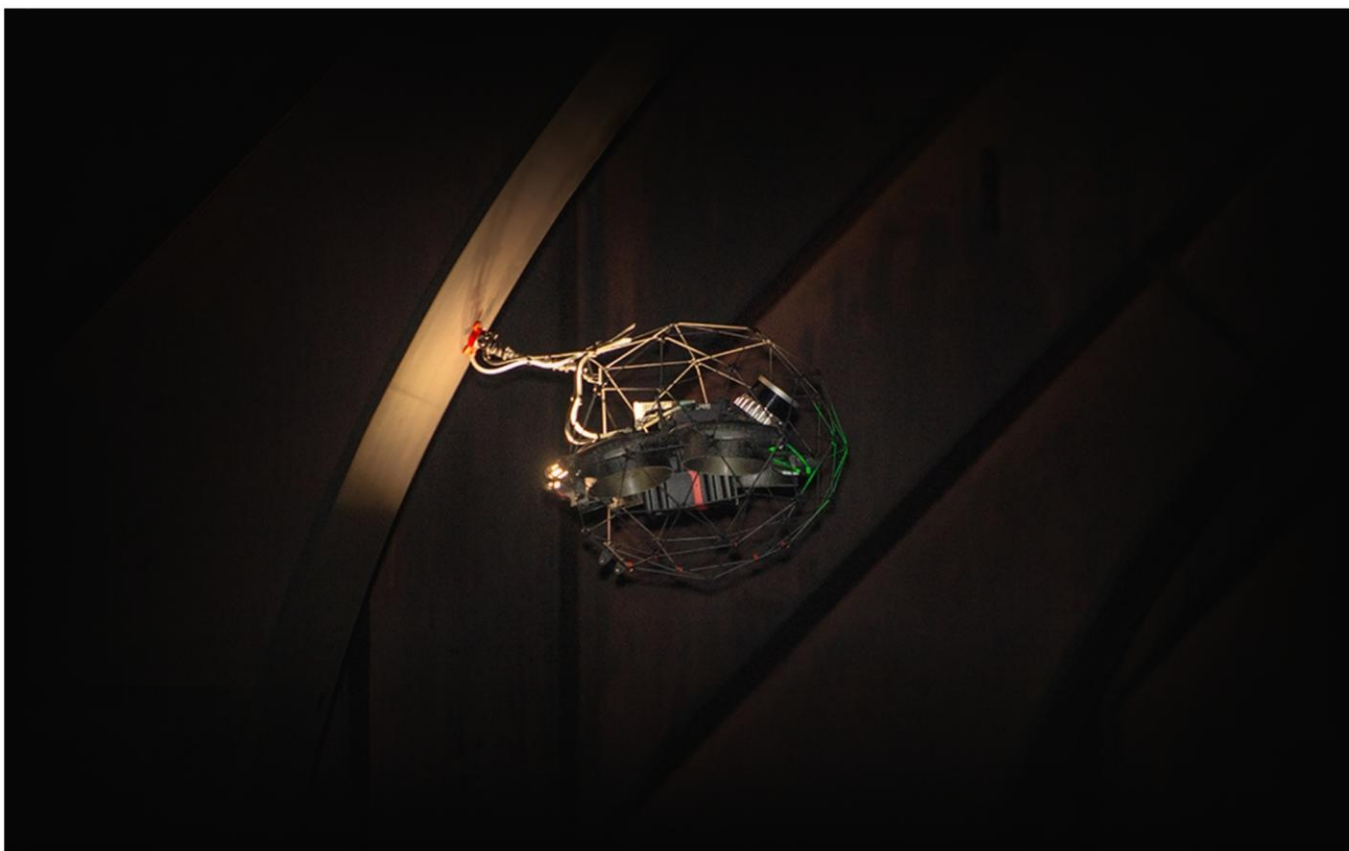


An aerial photograph of a large container ship sailing on a deep blue sea. The ship is viewed from above, showing its long hull and the deck covered with numerous colorful shipping containers in shades of red, blue, yellow, and green. The ship's bow is on the left, and the stern is on the right. The water around the ship shows some whitecaps.

Remote drone inspections in maritime

By Custom Wind Solution



Our drone was designed from the outset to perform contact inspections, making it the ideal tool for close-up visual inspections and UT measurements, even in tight and hard-to-reach areas.

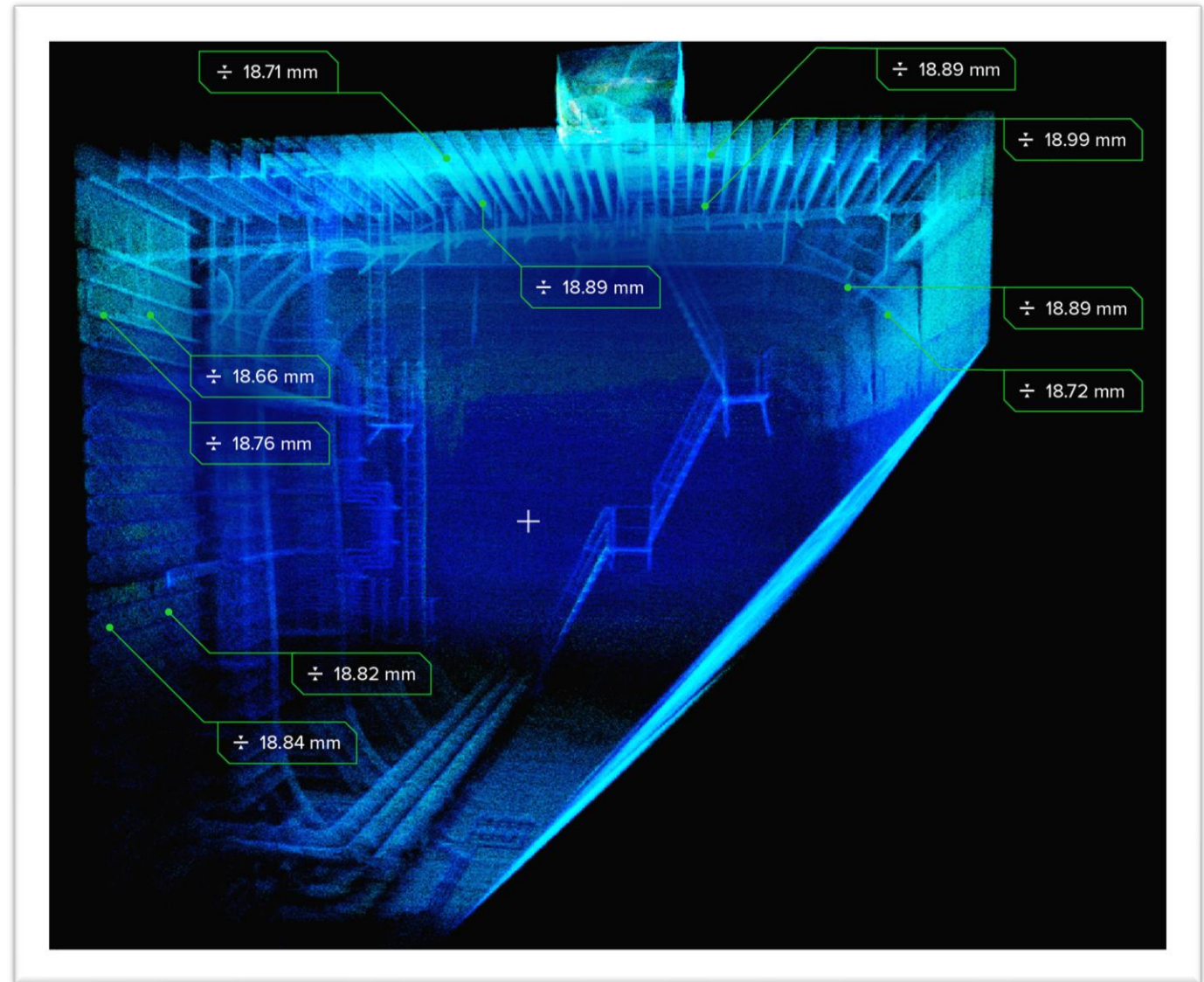
The UT payload, developed in collaboration with Cygnus Instruments, enables the drone to perform accurate ultrasonic thickness measurements on ships and other equipment.

Combined with advanced LiDAR technology, the drone is able to accurately locate and display all measurements in a 3D model of the device.

We provide you with all the data you need for CLASS inspection, while keeping inspectors safe on the ground and saving you significant time and money.



- General visual inspection
- Close-up visual inspection
- UT spot measurements
- Corrosion or crack monitoring
- Foreign object detection
- Digital twin



We meet all CLASS inspection requirements and more with a single maritime drone.

Image represents

Software output and 3D model captured by the Elios 3 while inspecting the cargo tanks of a vessel.

Safety

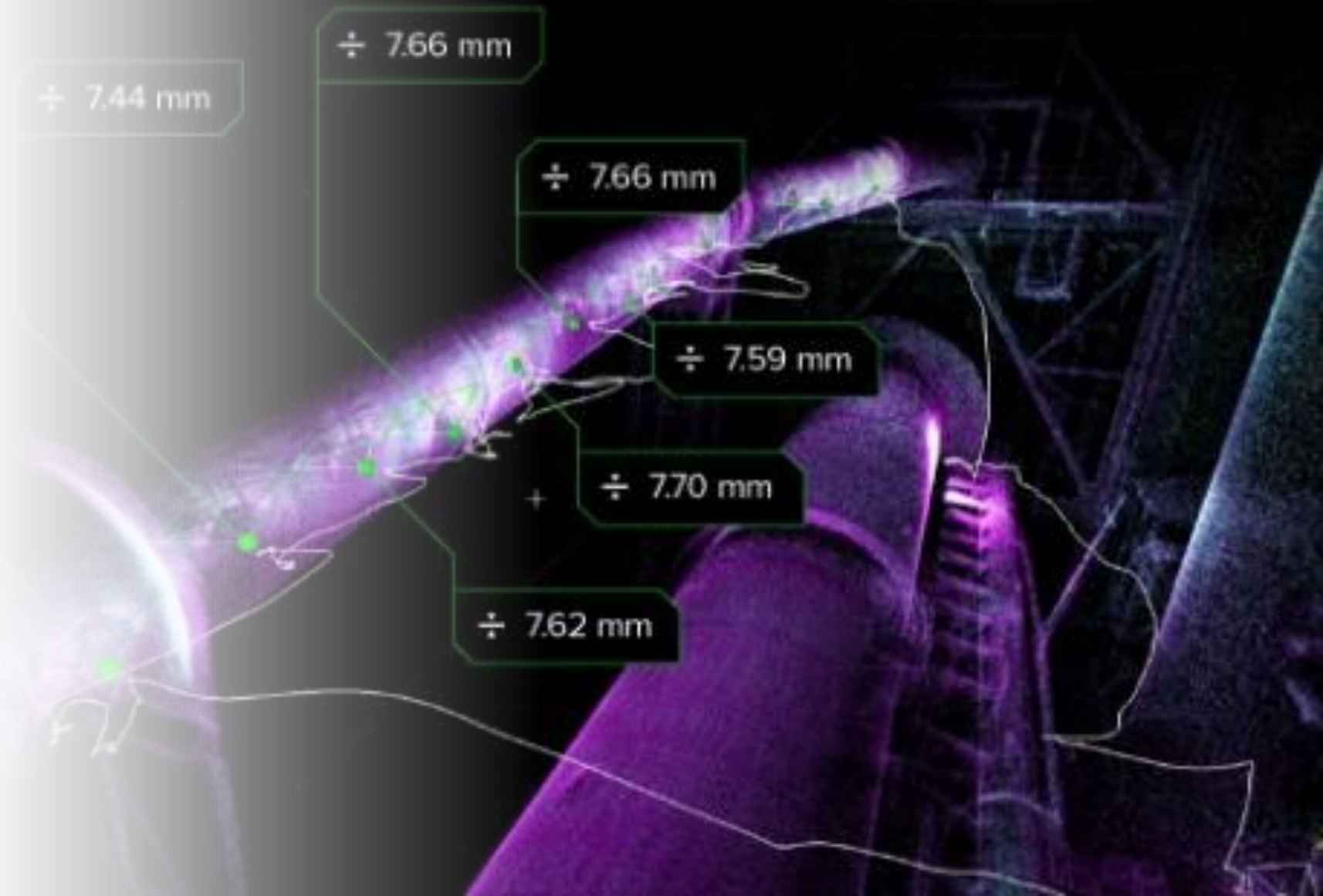
Avoid having personnel working at height or in confined spaces by performing remote drone inspections even in GPS-denied areas.

Efficiency

Save up to 90% of costs by avoiding scaffolding and rope access specialists. Inspect in a team of just two and capture UT measurements up to 10x faster.

Downtime

Slash downtime by up to 80% and inspect even while at anchor.



Cargo tank visual & UT inspection

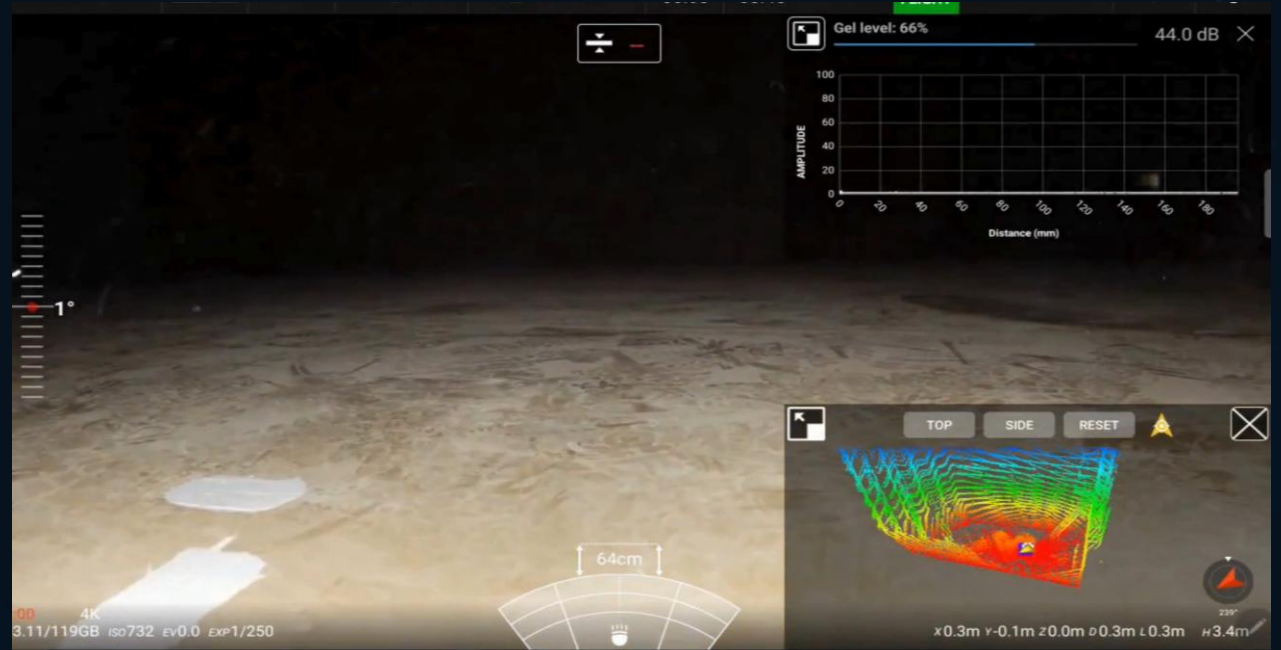
We perform a cargo tank inspection in just a few hours and without the need for scaffolding or rope access.

Using a drone, we can safely collect visual and UT data from the deck with just two people.

Save over \$1M in scaffolding and reduced downtime when inspecting six cargo tanks or more.

Drone technology provides easy access to a vessel's cargo tanks, eliminating the need for confined space entry or flotation devices.

- **Speed**
Cut inspection time by over 90%
- **Cost**
Save over \$1M in scaffolding and reduced downtime
- **Accuracy**
Detect cracks and other issues in minutes



Ballast tanks visual & UT inspection

We safely inspect the ballast tanks of a maritime vessel without the need for confined space entry, collecting close-up visual and UT data in the process.

This reduces the cost of scaffolding and rope access, while enabling the creation of **accurate digital twins** of the vessel for future comparisons.

While remaining at a safe distance, we inspect a ballast tank and collect 4K video footage and live A-scans with accurate data localisation.

- **Speed**
Inspect up to **10x faster** than traditional methods
- **Safety**
Avoid human entry and work at height
- **Efficiency**
Inspect **5 ballast tanks per day** in a team of just two



External hull visual & UT inspection

Thanks to the drone, we can easily inspect the hull of a vessel and avoid using scaffolding or rope access. We can perform the inspection from the ground and capture accurate UT and close-up visual data.

This technology allows us to capture close-up images and UT measurements up to 20 times faster.

You can save up to \$1 million on hull inspection costs.

- **Speed**

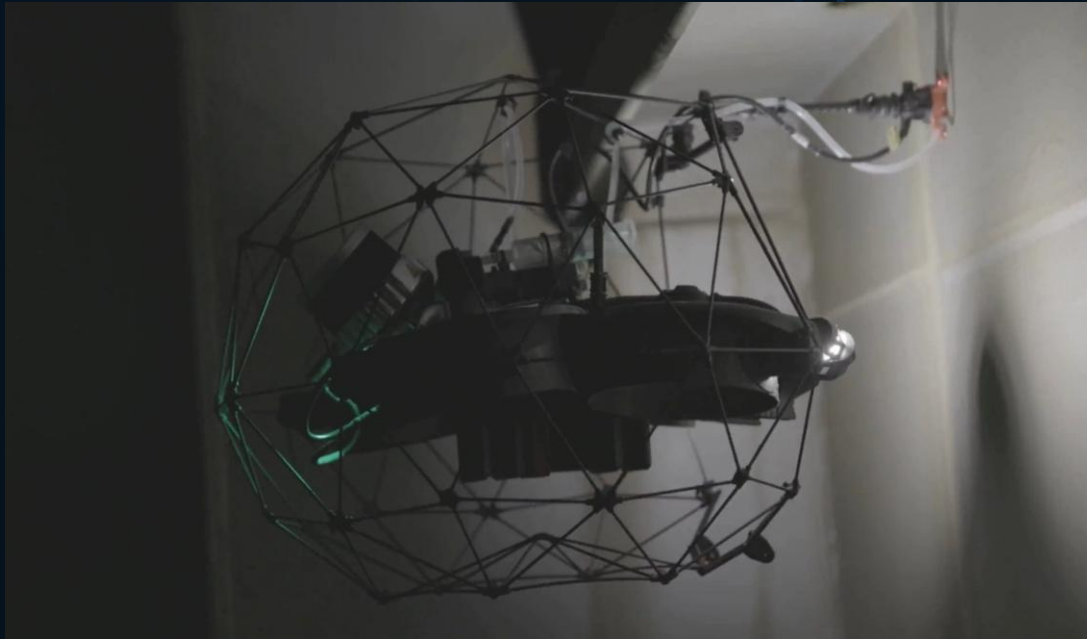
Save 15,000 hours of work on a hull inspection

- **Accuracy**

UT and visual data accepted by a classification society

- **Efficiency**

30 readings / 10 minutes



UT payload Technical specifications

Probe type	Dual element transducer (piezo-composite crystals)
Probe manufacturer	Cygnus Instruments
Measurement Range in Steel	0.8mm to 250mm1 (Depending on probe and configuration, material, temperature.)
Measuring Mode	Mode 2 (Single Echo) and Mode 3 (Echo-to-Echo)
Gain and Gate Control	Automatic or Manual Gain and Gate Control
Accuracy	±0.1 mm (±0.004”) or 0.1% of thickness measurement whichever is the greatest
Resolution	Display 0.1 mm (0.005”) or 0.01 mm (0.0005”)
Gel acceptable viscosity	1:1 mix of standard UT gel with water for optimal performance
Certifications	RoHs, CE, FCC, FDA, IC (only for final MP)



**Let's work together to ensure your ship inspections are
faster, safer and cheaper!**



**Custom Wind
Solution Plc.**



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