

TIAMAT™

**NEXT GENERATION SUBSEA
INSPECTION TECHNOLOGY FOR
THE ENERGY TRANSITION**

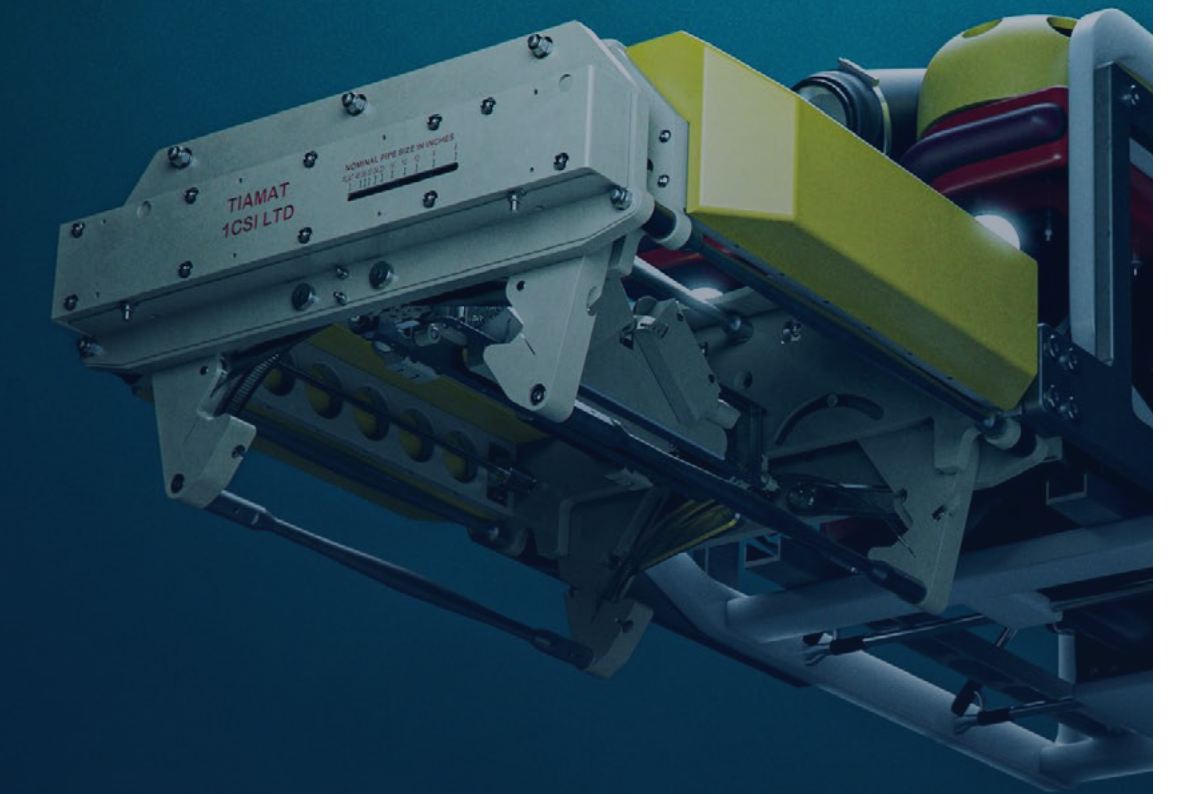
TIAMAT is an innovative subsea inspection technology for the energy transition, developed in-house by 1CSI to meet the needs of the oil & gas, renewables and defence Industries.

This high-resolution ultrasonic inspection tool offers a single platform for corrosion mapping and weld inspection of subsea assets.

Featuring compact, modular housing and multiple phased array probes that function simultaneously, TIAMAT can perform inspection scans of hard-to-reach areas quickly and efficiently, without the need for dedicated vessel or diver support.

APPLICATIONS

- ▶ Subsea pipeline and riser bends
- ▶ Subsea manifolds and flowline jumpers
- ▶ Flexible riser – fluid detection
- ▶ Flexible riser – remaining tensile armour wire thickness
- ▶ Subsea storage tanks and columns
- ▶ Mooring chains and hull inspections
- ▶ Any geometries, curved and flat sections of subsea structures
- ▶ Wind turbine monopile, including internal and external corrosion mapping and weld inspection
- ▶ Submarine hulls



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TIAMAT IN ACTION**

FASTER SUBSEA INSPECTION

TIAMAT can inspect subsea structures 200 times faster than traditional methods. In a single pass, the tool significantly boosts the quantity of inspection data gathered and reduces inspection duration (and the emissions produced as a result). The innovative TIAMAT system can reduce operational and deployment costs by up to 55% per campaign.

PORTABLE, COMPACT, EASY TO DEPLOY

Deliverable from any size of ROV (including micro ROVs) TIAMAT can detect wall thickness, cracks and flaws on complex subsea infrastructure without requiring specialist vessel support or multiple deployments. The innovative tool can inspect a range of diameters, thicknesses, coatings and materials with patented probe motion control that can move from flat to curved structures without having to be retrieved and redeployed.

THE FUTURE OF SUBSEA INSPECTION

TIAMAT provides reliable, multi-transducer ultrasonic subsea inspection, increasing the quantity and quality of inspection data collected.



Data collection 200 times faster than existing subsea scanners



Small enough for tight spaces with horizontal and vertical modes



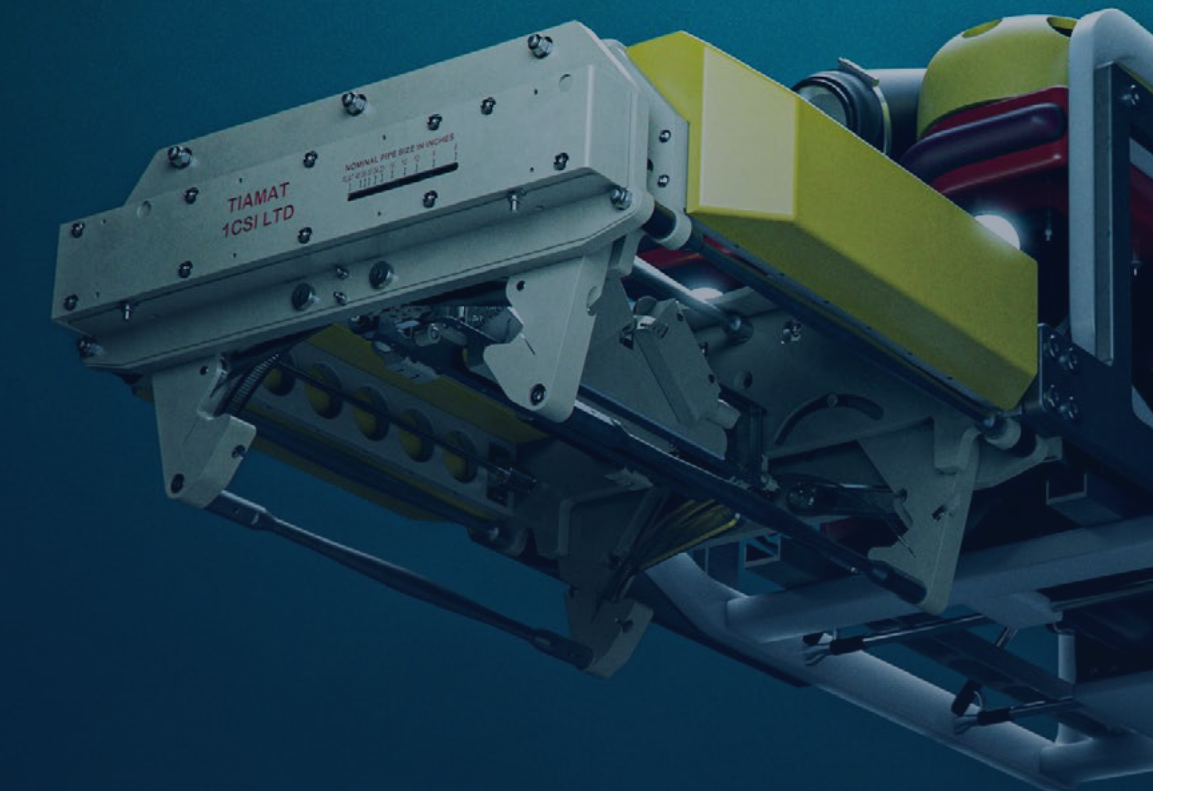
Subsea – inspect installations, infrastructure and remedial work



Renewables – use for internal and external monopile scanning

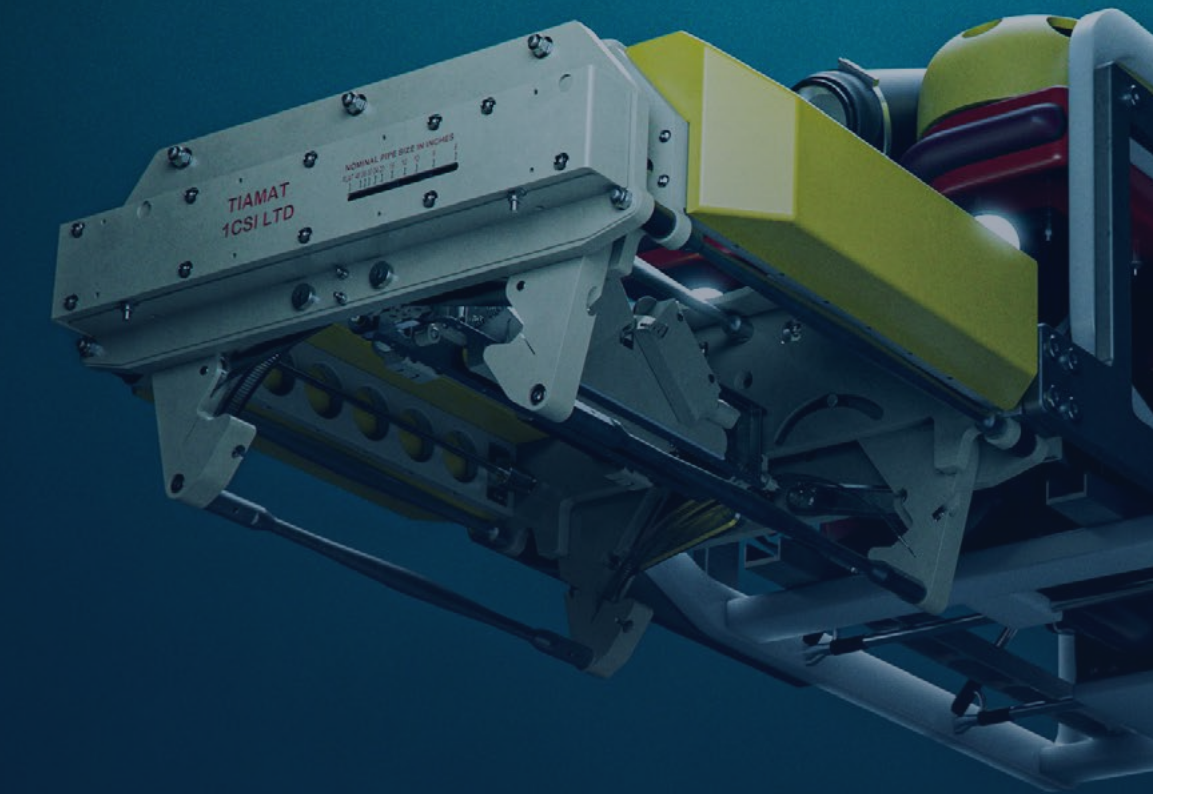


Marine – check hulls, external access and internal tanks without dry dock



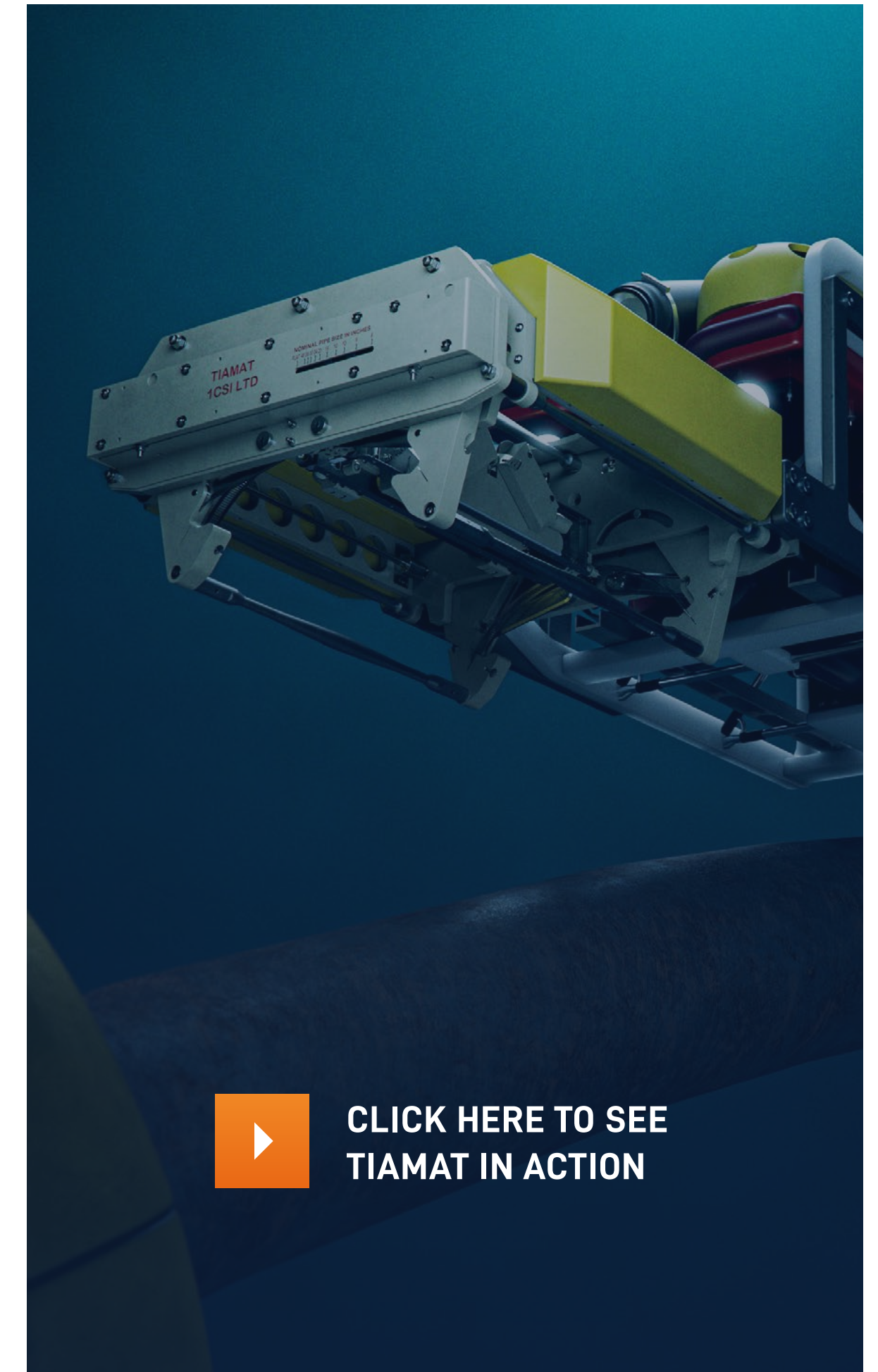
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- Rated to 3000m
- Deployment method via ROV (work and inspection class) or AUV
- Fibre optic link to surface (via ROV if required)
- 3 x multi-element probes (128) working simultaneously
- Inspection resolution mapping -1 x 1mm
- Scan area (single pass) – A4 size
- Field measuring accuracy of +/-0.3mm
- Contactless probe inspection
- Full HD camera – rated to 4000m
- 200 times faster than traditional scanning with associated inspection coverage
- Weld inspection using phased array transducers
- Multi-diameter configuration – 6" to flat surfaces
- High-resolution, colour graphic asset examination with real-time images
- Deploys from offshore installations, FPSOs and support vessels
- Qualified operative provided to work alongside ROV crew



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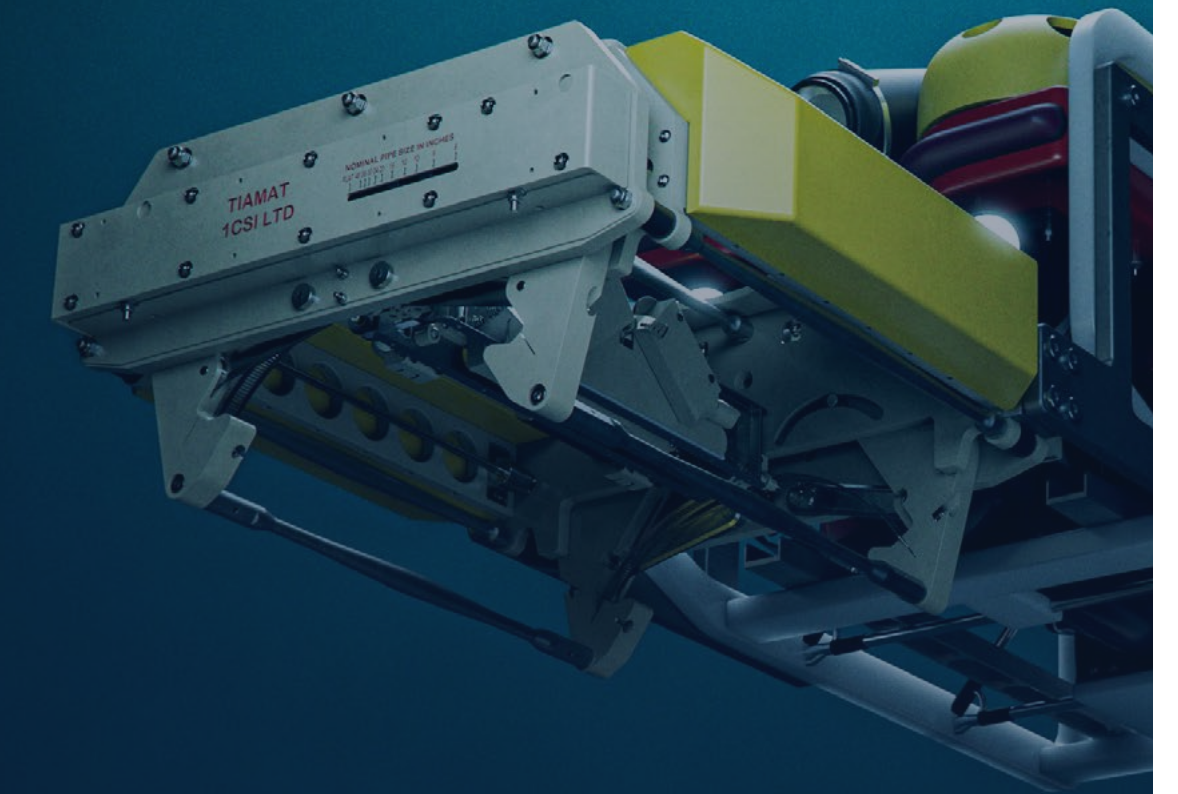


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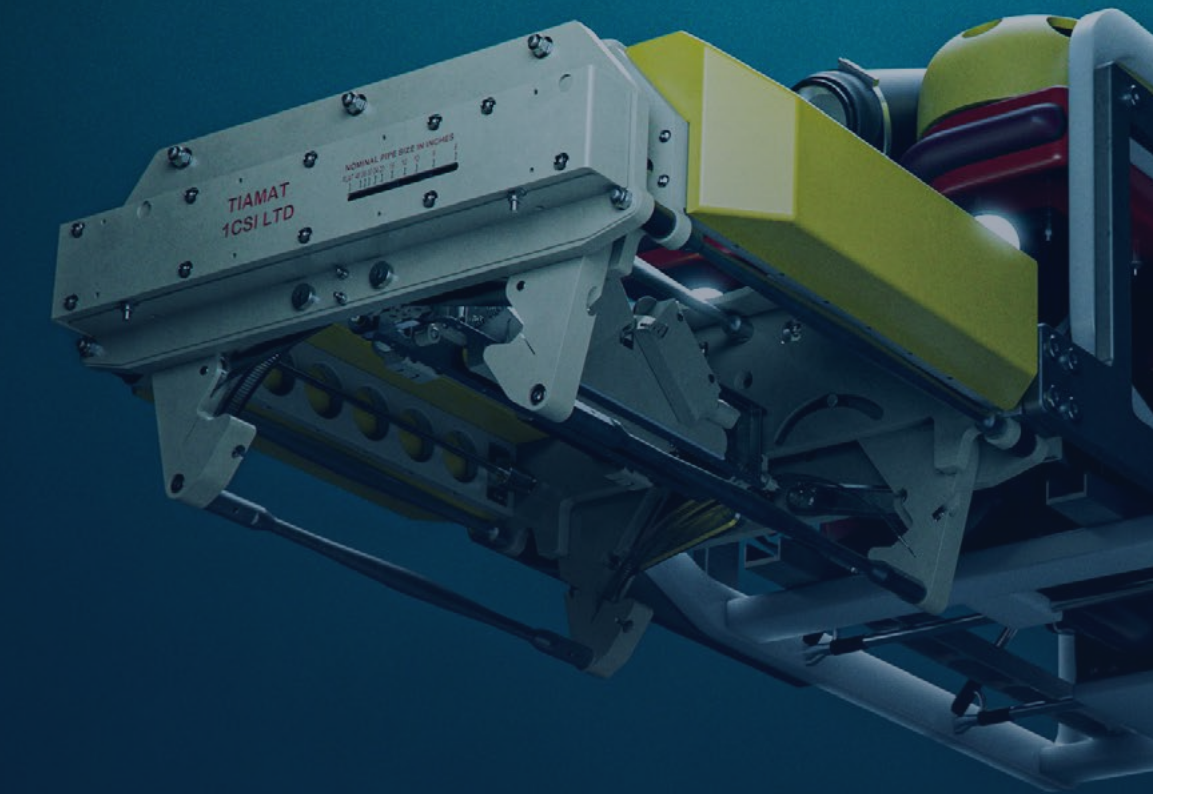
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1CSI – at the leading edge of subsea inspection solutions

At 1CSI we really strive to innovate, support your subsea inspection scopes and optimise your subsea integrity management. We develop new technological solutions for existing applications as well as unexplored applications, always focused on delivering optimal results for each of our clients.

We are committed to finding and delivering the most innovative and cost-effective solution to manage the integrity of your subsea assets and infrastructure.

We work with key clients across the oil & gas, renewables and defence sectors, providing solutions and best practise project management services that keep subsea assets running safely and efficiently, in line with regulatory code and best practise.



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