

ARGUS NCT

Argus remote systems has won a contract with the Danish company NCT Offshore to deliver two Ultra Compact Worker ROV systems.

NCT offshore approached Argus with specific requirements for a compact yet robust vehicle capable of executing precise tasks under challenging conditions.

The primary application of these ROVs will be touch-down monitoring during cable laying processes as well as messenger line retrieval, two critical operations requiring precision, reliability and durability.

The vehicles will be mobilised onboard NCT Offshore's newest super-hybrid cable lay vessel which is currently under construction. Delivery is planned for later this year.

In response to NCT Offshore's requirements, Argus developed a new Ultra Compact Worker ROV model. This combines the latest underwater technology with Argus' expertise in engineering ROVs that can withstand the rigours of subsea environments.

"The Ultra Compact Worker Rov is designed to meet the demanding conditions of operations in strong current areas and specifically tailored for the offshore wind industry," said Frode Gaupaas, chief commercial officer at Argus.

"The new system has advanced navigation and control systems, ensuring unparalleled



Argus Worker

performance in areas with strong currents

INSPECTOR

Last February, Argus renamed its Mini Compact Observation ROV, to the Inspector. The company felt that the new name more accurately captures the core functions typically associated with this class of vehicle.

To date, Argus has deployed over 25 mini vehicles globally, and has received very positive feedback for their performance.

The Inspector is a 3kw vehicle with four vectorized horizontal and two vertical thrusters designed as a robust platform that enhances video quality for inspection tasks. The vehicle can also be equipped with a grabber or a small manipulator.

Customers can choose between an HD or 4k camera configuration, depending on their specific needs.

"This flexibility, combined with the inspector's proven reliability, makes it an invaluable tool for



The Inspector



New Design

detailed underwater inspection and monitoring," said a spokesman.

NOVEL ROV FORM

Looking forward to future vehicle developments, Argus are contemplating a new ROV using a completely different hullform

"In the recent past, we have a few requirements from various customers for a high-speed vehicle," said Gaupaas.

"These niche designs are already used for seabed mapping by a high speed multi-beam seabed survey, and for pipeline inspections.

"The ROV we're envisaging is fully electric and will be able to travel around 5-6kts and work down to around 1500m.

"At the moment, this vehicle is about four metres long or closer to a metre

wide. It will include all of the newly developed functionalities present on our current series of underwater vehicles. We believe it will be particularly efficient in detecting unexploded ordnance on the seabed, which is a great challenge to the wind renewables sector.

"While controlled by a pilot, it will include basic autonomy. The vehicle's control system, it will incorporate an obstacle detection facility so when flying on a trajectory and object is detected, the ROV will automatically fly around it.

"If you look at the industry in general, you will note that we are still flying the vehicles the same way we did 30 years ago. I believe that we need to look at what time we improve as a fundamental strategy objective."

Its long thin hydrodynamic design

is very similar to the AUVs on the market. Do Argus plan to go down the fully autonomous route?

"We have considered the idea, but we still believe that ROVs still have a lot of untapped potential," said Gaupaas.

"From a technical point of view, there is no problem adding a battery on a vehicle. Once the engineer removes the cable, however, there are a lot of new challenges. There is suddenly no bandwidth available for video, for example.

"I believe that AUVs are fantastic in their place- very stable and useful for certain types of seabed mapping but there is certainly room for ROVs and AUVs in the market.

"Once we have these designs fully finalised, I believe potential customers will be very interested in what we plan to do. We intend to start building the first system later this year."