

# Argeo Chooses Eelume Underwater Inspection Solution



Argeo AS, a survey and inspection company focused on subsea data acquisition and visualization, has selected Eelume's autonomous 'snake robot' to assist in their operations in the first commercial contract to be signed for this innovative technology. Eelume's advanced robotic solutions have been developed with the assistance of Kongsberg Maritime, who remain a

majority shareholder in the venture.

Argeo's stated aim is to transform the ocean space inspection industry through robotics, sensors and data analytics technology. By enabling more efficient acquisition of data with higher accuracy using technologies such as Eelume, the company can construct advanced and highly accurate digital models based on geophysical, hydrographic and geological data. This enables organizations in the infrastructure, offshore wind, oil & gas and marine minerals industries to significantly reduce their operational carbon footprint, since large surface vessels are no longer needed.

## Towards Robotic Underwater Operations

"We believe that this is just the beginning of a major shift in how the industry conducts underwater operations. There is a need in the market for this type of solution, and we anticipate a significant requirement for more robots of this type in the long term," said Trond Crantz, CEO, [Argeo](#). "In addition to lowering the carbon footprint and increasing efficiency, [Eelume technology](#) will enable Argeo to significantly reduce the costs related to inspection, light intervention and monitoring (IMR) of subsea assets and infrastructure. Currently, 90% of these costs are vessel-related. Implementing Eelume as a resident inspection tool for offshore wind and oil & gas will replace up to 70% of vessel activities."

Kongsberg has been actively involved in Eelume since the company was founded in 2015 and has brought almost 30 years of experience gained from their HUGIN Autonomous Underwater Vehicle (AUV) to the development of the Eelume snake robot. "After many years of focused research and development by an incredibly strong team at Eelume, the time has come to enter into commercial contracts for autonomous Eelume vessels," stated Thomas Nygaard, senior vice president Marine Robotics at [Kongsberg Maritime](#). "It is very gratifying that we have been able to so quickly agree this, our first commercial contract, for delivery to Argeo. The combination of Eelume with Argeo technology promises to be a disruptive force for many applications in the ocean space."



The Eelume autonomous underwater robotic solution conducting a dual side pipe inspection.

## Autonomous Underwater Robots

Within offshore energy, there is a growing demand for autonomous underwater robots that can perform tasks with minimal human intervention on-site, reducing costs and emissions while increasing safety by allowing personnel to stay on land. Eelume aims to become a leading player in this market, developing autonomous underwater robots with unique properties for different types of missions. "We are very pleased with this sale of our underwater snake robot to Argeo," said Morten Bjerkholt, CEO, Eelume. "Argeo's plan to offer inspection and mapping assignments based on autonomous submarine robots suits us perfectly and shows that our unique technology, using the snake robot as a carrier of sensory technology to carry out autonomous inspection assignments, meets a customer need. We look forward to further collaboration with Argeo, where we will also look at opportunities to integrate specific sensors from Argeo into separate modules of the robot."

In operation, one Eelume robot can typically provide a serviceable footprint of 50–75km<sup>2</sup>. Argeo propose matching the technology with their Unmanned Surface Vessels (USV), making the Eelume an effective mobile survey solution complete with deployment and recovery system. "Argeo's uniqueness comes from patenting and developing advanced sensors and analytical tools that integrate straight into robotics platforms such as the Eelume robot," said Crantz. "This uniqueness, coupled with disruptive robotics solutions, allows us to solve costly everyday problems for large and existing clients worldwide. We are very excited to start this journey and to continue our collaboration with Eelume and Kongsberg to transform the IMR industry."

Both Eelume and Argeo’s aims are wholly in accord with Kongsberg Maritime’s focus on sustainable and autonomous technologies. “Argeo has shown itself to be a forward-thinking and innovative company that will use unmanned solutions to save both carbon emissions and costs,” concluded Nygaard. “Furthermore, such solutions will increase safety in the offshore industry, by allowing more of the operations that are currently performed offshore to be moved safely to land through robotics and autonomy.”



Argeo has signed the first commercial contract for Eelume’s snake robot technology. From left: Atle Gran, Kongsberg Maritime; Trond Crantz, Argeo; Thomas Nygaard, Kongsberg Maritime; Morten Bjerkholt, Eelume.