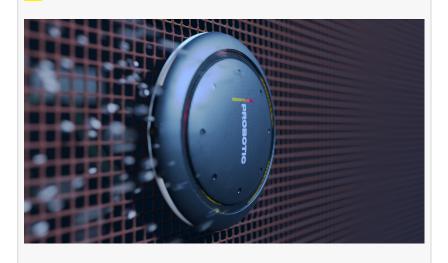


Probotic Reveals Findings From New Aquaculture Underwater Drone Test

Preliminary results from pilot testing illustrate the power of underwater drones to revolutionize clean aquaculture

NARVIK, NORWAY, August 23, 2022 /EINPresswire.com/ -- Probotic, an aquaculture technology company, reveals its initial findings from pilot testing on its innovative Probot underwater drone. The drone revolutionizes aquaculture by automating the inspection and cleaning of fish pen nets, one of the fish farming industry's most significant pain points. The automation results in cleaner food production, increased animal welfare, decreased operational costs, and reduced climate emissions.





The testing of the drone at Ballangen Sjofarm's sites began this summer. Now, after a month of testing, the mechanical aspects are proven. The following testing will be related to optimizing the drone's steering algorithm and detection algorithm. The prototype currently in testing is



The idea for this technology came to me after working several years inspecting and cleaning fish pen nets the traditional way. I knew there could be a more efficient way to get the job done."

Mikkel Pedersen

Probotic's seventh series of prototypes and is the last prototype series before the production model launches.

Significant findings after the first month of testing Probot prototype P.7:

- Jet-propulsion system works in real conditions and enables seaweed to flush through the water jet.
- Probot can operate in 90cm/sec of water current when in cleaning mode.
- Probot can operate 180cm/sec of water current when in

inspecting mode.

- The submersible docking station holds the drone secured in place and has gone through one storm with measured one meter/second of water current.
- The hydrodynamics of the drone allows for smooth movement in the water.
- Live video and sensor data from drones are now available.
- Beta version of detection algorithm already finds holes.
- No dealbreakers after a month of testing.
- *This is today's development status; all stated findings are expected to be improved by further development.

"The idea for this technology came to me after working several years inspecting and cleaning fish pen nets the traditional way," said Mikkel Pedersen, CEO, and founder of Probotic. "I knew there could be a more efficient way to get the job done,





so I got to work on my vision of building a robot that would automate these processes, saving aquaculture companies hours of labor and operational costs."

The fish farming industry's current method of cleaning fish pen nets is reactive, meaning they clean when the buildup of algae growth and debris is so severe that you must clean the nets. This reactive approach negatively affects the environment, fish health, and operators and is costly and resource-demanding. The traditional systems are still partially manually operated and use high-pressure water pumps to remove algae and debris. One of the problems is that the biofilm is flushed directly into the net and causes a less than satisfactory environment for the fish.

The Probot underwater drone uses a preventive method that's a more natural and gentle way to clean the nets and hinders biofilm creation on the fish nets entirely; This is possible by constantly cleaning around the clock. The only times the drones will be paused are during battery charging or additional inspection by the operator.

"The Probot system will be rented out as a service, which ensures our sustainability goals and gives us control over the product lifecycle. It also means we are responsible for ensuring the product will function as expected throughout its life, allowing customers to focus on its other high-value operations," Pedersen added.

About Probotic

Founded in 2017 by Mikkel Pedersen, Probotic is an aquaculture technology company based in Norway. The company has made strides in revolutionizing aquaculture by creating Probot, an underwater drone that automates the inspection and cleaning of fish pen nets. For more information, visit https://www.probotic.no.

Mikkel Pedersen Probotic mikkel@probotic.no Visit us on social media: Facebook LinkedIn

This press release can be viewed online at: https://www.einpresswire.com/article/587264291

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2022 Newsmatics Inc. All Right Reserved.