Voliro

Advanced flying robots to revolutionize work at height

Wyss Zurich
Translating
Science into Life

Voliro

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Startup website
www.voliro.com

Voliro
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www.wysszurich.uzh.ch

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Regular Inspection and Maintenance (I&M) of critical infrastructure is crucial to ensure safe and continuous operation. Often these I&M operations are in difficult to access areas which expose operators to various risks at height or in confined spaces. Robots can greatly reduce the risk, time and cost of I&M operations in many industries.

Voliro is developing advanced flying robots capable of performing I&M tasks more safely, cost-effectively and faster than traditional methods. Classic drones on the market fail to execute physical work by design.

Voliro's flying robots can be equipped with a variety of payloads, such as Non-Destructive Testing (NDT) sensors, spraying systems, or even drills. Being able to apply several kg of forces in any direction makes it possible to execute physical work on complex objects and surfaces. Using the tilting rotor-system, a high degree of position accuracy can be achieved while moving and correcting for wind.

Voliro expands the abilities of service drones from **"flying and seeing"** to **"flying, seeing and touching."** This novel ability to interact with the environment through a flying platform opens up large markets in which construction or maintenance tasks require additional infrastructure. Such tasks include non-destructive infrastructure inspection, which often requires a sensor to be in contact with structures; the spraying of fluids to clean buildings; the cleaning of walls and windows; and the painting and coating of surfaces.