



Safer and cheaper repair of offshore wind turbines by robots

29 January 2019, 01:00

Pieter Jan Jordaens

A Danish company develops robots to maintain and repair the blades of offshore wind turbines. In this way, a lot of time and money can be saved. Other robots can also be used for offshore applications.

The Danish firm [Rope Robotics](#) develops and produces a unique repair solution for offshore wind turbine blades. The robot can handle all phases of maintenance and repair of these blades. Repairs on turbine blades are currently performed by specially trained technicians on ropes, which means repairs can only take place in good weather conditions. The automatic BR-8 robot can take over this cost- and labour-intensive job and could therefore reduce the time and costs required for maintenance and repair. It stands for a high level of efficiency, advanced process quality, improved EHS (environment, health, safety), ...

This start-up firm receives [support from the Danish government](#) for the further development of solutions to reduce manual labour in hazardous and complex environments while improving the health and safety of technicians working at sea, while optimising quality and costs.

The emergence of robots

An increasing use of robotics and tools for digital inspection & monitoring to support maintenance of wind turbines is emerging. Not only drones are used more often, experiments are also ongoing with other types of robotics. Siemens-Gamesa (top 3 wind turbine-OEM) recently released a [video](#) in which the Rope Robotics-tool is demonstrated.

The Swiss [ANYbotics](#) recently came into the [picture](#) with the use of the first autonomous - the four-legged 'Anymal' - as proof of concept for support in the inspection of offshore transfo stations. Watch the video of this demonstration case [here](#).



Proof of concept of an inspection tour with the ANYmal-robot in an offshore transfo station

You are an operator in the area of offshore energy or are interested in discovering the possibilities for your company in this growth sector? The [Innovative Business Network for offshore energy](#) will give you support in relation to offshore wind-, wave- and tidal energy and access to a network of expertise and contacts.

More information is available here: <https://www.vlaio.be/nl/begeleiding-advies/coaching-en-advies/offshore-energy> and <http://www.offshoreenergycluster.be>.

(Source picture above : Rope Robotics)



Authors



Pieter Jan Jordaens