

NYHETSDESKEN

ANDERS THELIN Tel: 0911-645 26

ELIN BACKLUND

TIPSA OSS

Telefon: 0911-646 00 Mms: PTBILD till 72 018



Greger Nilsson has recently tested an epoxy glue that hardens in minus degrees to repair damaged wing blades

PHOTO: PRIVATE



Greger Nilsson from Öjebyn repairs damaged wind turbine blades with an adhe sive that hardens in minus degrees. He thinks it is important to emphasize that it is not only foreign companies that work in the wind power industry in northern



The blades of wind turbines are often damaged by ice that releases from the plant when the blades spin.

The super glue that fixes damaged wind turbines

ÖJEBYN

The epoxy hardens in minus degrees and is used to repair damaged wind turbine blades. Tests in sharp position have been performed by researcher Greger Nilsson from Öjebyn, hanging in wires from a wind turbine, 70 meters up in the air in severe cold.

Greger Nilsson from Öjebyn previously worked as a researcher at what is today called the research institute Rise. In 2013, he resigned from there to start his own in the wind power industry. The company was named Blade solutions and is niche in repairing deicing systems at wind turbines. Amona other thinas.

two in-house developed and patented repair methods are used.

That Greger quit Rise did not mean he put the research on the shelf. Between rounds. he participates in research projects and he occasionally appears in various composite contexts.

Ahead of the big composite conference to be held in Paris 2020, he was contacted by the Swiss company Huntsman who wanted him to join the company's stand. But there was a pandemic and the conference was canceled.

Recently, Greger has been involved in developing and then performing tests of a new type of epoxy, an adhesive that cures in sub-zero temperatures. The glue is used to make temporary repairs during the winter without the plant having to be shut down.

Greger works a lot for Skellefteå kraft and has performed many of the tests at Blaiken's wind farm where damage is repaired on site. According to Greger, it is important to be efficient during the repair work so you minimize the time in the air. The damage often occurs far out on the leaves where it spins at a speed of 250 kilometers per hour.

- The alue is used to advantage for minor damage to the blades, damage that usually occurs through icing from vour own wind turbine or from other nearby ones. It is important to repair the damage when it is small, if nothing is done the damage tends to

The defects are discovered

through inspections where the works are examined and damage can be seen with the naked eye. Damage can also be detected with the help of drones that take pictures and where the pictures are analyzed in image processing

programs. It is also possible to use a camera on the ground. The actual repair work can

also be performed in different ways. Skylift or various platforms can be used but Greger and his colleagues climb industrial.

- You rig up ropes to the tower and winch up to the blades. You work in pairs and hang in wires on each side of the blade.

What about the fear of heights?

- It's a training thing. I saw how it was done and learned it, says Greger Nilsson.



