

Newly developed filtration system dramatically reduces downtime in wind turbines: no need for oil changes in the future.

A new and revolutionary oil filtration and recovery system is good news for wind farm owners. The unique system, developed in a partnership between Hydratech Industries and Delta-Xero, is equipped with nanofiltration, removing water, varnish and harmful particulates down to 0.1 Micron particle size protecting the pitch hydraulic oil and gear oil optimally. The technology is already well proven and in use in a wide range of heavy duty industries.

"It is a game changer in the industry, because today, a normal filter only filters down to 3 Micron particle size, which allows 30 times larger particles than our new system. It is the first time that the three biggest challenges; water, varnish and harmful particulates, can be solved within a single filter element system," says Mikael Albrechtsen, Executive Vice President Global Service & Aftermarket at Hydratech Industries.

The new oil filtration and recovery system will be launched on April 21, 2021.

No need for oil change

Specifically, this will mean that your gear oil and hydraulic oil can be in operation for a considerably longer time and in best case it will not be necessary to replace either the hydraulic oil or the gear oil on a wind turbine for its entire life. This will also dramatically extend time between replacing spare parts such as cylinders, accumulators, valves, bearings, and pumps.

"Taken together you avoid profit-eating downtime, expensive repairs and maintenance requirements because the newly developed oil filtration and recovery system ensures a cleaner oil and thus optimal lubrication throughout the system, while not leaching the additives," says Mikael Albrechtsen, Hydratech Industries.

Environmentally friendly

The new filtration system is environmentally friendly. The filter itself is made from recycled materials, and the used media meets environmental waste standards for energy plants. In addition, the oil does not need to be changed and the components last longer which is also a benefit to the environment.

"Both we and our customers focus on the environment, and therefore it has been crucial for us to develop a system that considers the environment, operations and finances. None of these three factors can stand alone," says Mikael Albrechtsen, adding that Hydratech Industries aims to contribute to zero environmental impact during production, operation and dismantling of wind turbines.

Cost recouped in one year

Hydratech Industries on site tests and calculations show that the expense of installing the system on a new turbine or an existing turbine in operation will be recouped in as little as one year.

"Cost must be held up against the equivalent of avoiding oil changes, numerous component replacements during the life expectancy of a wind turbine and factoring in turbine downtime. If that number is multiplied by 100 turbines in a wind farm, you are looking at savings in the millions," says Mikael Albrechtsen, Hydratech Industries.

Unique collaboration

Delta-Xero Distribution Ltd has for many years developed filtration systems. Founder and CEO, Paul Whiting is excited to introduce Delta-Xero's fluid conditioning to the wind turbine sector.

"It's a unique, proven technology already in use in a wide range of industries; examples of these include power plants, offshore oil and gas, hydraulic, gearbox and large turbine lubrication systems. Delta-Xero also filters diesel on gas engine applications. Now, in cooperation with Hydratech Industries we are ready to take this next, big step. We have chosen to do so with Hydratech Industries because we see them as a leading supplier in hydraulic solutions with exceptional engineering skills," says Paul Whiting, CEO and founder of Delta-Xero Distribution Ltd.

Facts:

Hydratech Industries, founded in 1975, is a global market leader in the development, manufacture and servicing of high-quality hydraulic cylinder systems. The company is based in Denmark with subsidiaries in China, India, USA and Czech Republic and offers full global service to customers.

Delta-Xero Distribution Ltd, founded in 2018, is based in Fareham, UK and manufactures high performance, easy to use, offline fluid conditioning systems for hydraulic, lubrication, fuel and other operating fluids used in the energy, construction, marine, waste management and manufacturing industries.

More info:

Hydratech Industries A/S: Mikael Albrechtsen, Executive Vice President Global Service & Aftermarket:
mal@hydratech-industries.com, +45 28 79 77 28

Delta-Xero Distribution Ltd.: Paul Whiting, CEO and founder: paul@delta-xero.com, +44 (0)7432 005098