Decrease downtime and increase output Retrofit control systems

SPICA TECHNOLOGY excellent development

Retrofitting your control system makes good business sense

Retrofitting of aging turbines, many of which are surpassing their designed lifetime, has long been an area of interest for service providers and wind turbine owners. Yet, so far, most focus has been put on replacing critical mechanical components in wind turbines - while obsolete control systems have stayed largely untouched. With around 20% of downtime in aging turbines caused by control system errors, a new, modern control system makes surprisingly good business sense.

Where is your focus?

Spica Technology delivers the only truly competitive alternative to time-consuming control system repairs and price-sensitive second hand controller purchases on the market today. The Spica Retrofit Controller, and the easy access to spare parts that follows, allows service providers and owners to move focus from the dwindling second hand controller pile to that of investment optimisation.

With more than 17 years of experience in the wind power industry, we have developed a unique line of retrofit control systems for a range of wind turbine types currently in operation. Our retrofit control system is an affordable, plug-and-play system that allows you to profesionally manage your investment and troublesolve, as you would a new, modern turbine.



The Spica Retrofit Controller comes with a dual display with the same structure as a TAC controller which makes it easy to operate and turbine maintenance more effective.

Crucial data for a range of turbine types

The Spica Retrofit Controller is based on advanced technology, comparable to what you find in modern wind turbines. We replace the old control system in your turbine with an up-to-date system that provides you with full, remote access to previously unavailable, valuable data. This extensive data collection makes it possible to monitor the turbine closely and carry out predictive maintenance that helps prevent costly break-downs. The Spica Retrofit Controller is designed to fit most aging turbine types such as the Nordex N29 and N43 and NEG Micon from M530 to M1800. The Spica Retrofit Controller is compatible with most monitoring systems and fully compliant with the environment in your turbine. Our retrofit controllers are certified by the Danish Authorities for installation and operation in turbines.



Quickly up and running - guaranteed

At Spica Technology, we know and respect the costs connected to downtime. Therefore, we have developed a product aimed at reducing downtime from the moment your order is placed. Besides building a controller that physically fits into the turbine controller panel and current wirering - a genuine plug-and-

The Spica Retrofit Controller advantages

- Increase output
- More valuable data
- · A competitive plug-and-play solution
- Guaranteed performance

play solution - we provide you with an unprecedented three year exchange guarantee, in case of a controller breakdown or serious malfunction. Also, our controller allows you to add additional sensors, monitoring systems, ect. Once onsite, the Spica Retrofit Controller is installed easily and quickly.

> 3 year exchange guarantee

EASY INSTALLATION SIMPLE TO USE

01

ORDER

Spica Technology is accustomed to handling orders from service providers, professional and individual turbine owners on markets across the world. We deliver the same swift service and close dialogue regardless of company size and

number of turbines. Order via phone or through our website today.



02 INSTALLATION

The Spica Retrofit Controller is easily and quickly installed into your turbine. We may take on the complete ask of installing the controller for you or make use of a skilled, local service partner who is familiar with the system.



O3 SUPPORT

Help is always nearby, but we doubt that you will need it much. Our Support Hotline is ready to offer qualified guidance and technical support. Remember, we offer a full three year exchange guarantee.



Call +45 8680 1440 Or visit www.spicatech.dk



Troublesolver for customers around the world

Spica Technology is an international engineering company dedicated to the wind power industry. We have designed, built and tested control systems for companies in and around the wind power industry throughout the last 17 years. Spica Technology carry own production capabilities and test facilities, and with our many years in the industry we hold considerable experience and know-how. This has given us a unique position as a manufacturer of customized solutions for wind power OEMs, service companies, and consultant/enginneering companies on a worldwide scale. We take on projects from small one day projects to largescale enginneering projects where we are in charge of the project management, milestones and FAT tests.

While Spica Techology's concept normally involves the development and production of customized product solutions for our customers, we also produce a line of own, quality retrofit products where the most significant is the Spica Retrofit Controller.

