

COMPANY PROFILE

LUDECA, INC.

By Stephen Sisk



Combining easy-to-use components, site services, and a support culture, LUDECA, Inc. offers the wind energy industry unique solutions to shaft alignment and condition monitoring.

AS A WIND FARM OWNER OR OPERATOR, how far would you go to ensure that your assets perform as efficiently as possible, for as long as possible?

Individual answers may vary, but the importance of the premise—operating efficiently and being able to plan for ordinarily unforeseen circumstances—can hardly be denied.

You don't have to be an engineer to understand or appreciate that premise. Having the knowledge and ability to make it a reality, however, is a different story. Some things are best left to the experts. Don't try this at home. Trust the professionals.

For more than a decade, wind farm owners for a large part have been trusting their efficiency and preventative maintenance needs to Florida-based LUDECA, Inc.—the exclusive distributor for Prüftechnik products in the United States, the Caribbean, and Venezuela.

That trust and the resulting long-term relationships, directly parallel the company's mission of combining experience, knowledge, and support "to be the premier provider of reliability solutions and technologies to industry."

"LUDECA, Inc. was founded in 1979 and engages in the sales and service of laser shaft alignment systems, condition monitoring, and vibration analysis equipment, oil particle counting systems, and reliability-centered maintenance services," said Alex Nino, wind application engineer with LUDECA.

Building on 24 years of industrial equipment sales and service, LUDECA first entered the wind energy marketplace in 2003. Three years later, in response to the expanding wind industry landscape, the company created the LUDECAwind division.

Through LUDECAwind, the company supplies wind energy maintenance personnel with tools to perform valuable O&M predictive and preventative maintenance tasks, resulting in increased efficiency, reduced downtime, and sizeable long-term cost savings.

"LUDECAwind offers laser shaft alignment systems for alignment of the high speed shafts in wind turbines (gearbox to generator), as well as geometrical alignment / flatness measurement of tower segments and flange hubs, and condition monitoring through vibration analysis," Nino said. "In addition, we offer both portable instruments to perform out-of-warranty inspections and online vibration monitoring as well as an online particle distribution counter."

Shaft alignment, Nino said, is essential not just for wind turbines, but in all rotating equipment applications.

"It guarantees that the machinery will run smoothly and efficiently," Nino said. "It also extends the life of the machinery by eliminating potential premature wear.

By performing proper shaft alignment, the users and owners of the machinery will benefit from the savings of having true scheduled maintenance and lower energy consumption."

"LUDECAwind's shaft alignment systems are specifically designed with wind industry applications in mind," Nino said, and are among the easiest to use alignment solutions in the industry.

"Our laser alignment systems are unique in that they only require a single beam laser, and minimal angle of rotation. We have brackets that fit all wind turbine manufacturers and provide the required accessories to guarantee excellent alignment for all the wind turbines and training for the technicians who are performing the work," Nino said.

Specific LUDECAwind product offerings and their applications include:

- OPTALIGN® SMART wind— a generator-to-gearbox shaft alignment system.
- LEVALIGN® EXPERT— a flatness and leveling measurement system for tower segments and rotor hub flanges.
- VIBROWEB® XP wind— a compact online vibration monitoring system.
- VIBEXPERT® wind— a portable data collector for vibration analysis; pre-loaded with turbine OEM data.
- WEARSCANNER®— a particle counter that monitors the distribution of wear particles in lubricants.

In addition to these products, LUDECAwind also the following services to wind farm operators:

- On-site condition assessment including drivetrain vibration monitoring.
- Dynamic alignment target monitoring and optimization.
- Dynamic foundation monitoring
- Flatness measurement of (hubs, flanges, and tower segments)
- Event monitoring and torque measurement
- Telemonitoring from its GL Certified condition monitoring center.

Beyond the company's product and services offerings, the comprehensive support and training functions that sets LUDECAwind apart from competitors in the industry.

"We provide service and in-depth training in several areas such as alignment, vibration analysis, reliability-centered maintenance, and balancing," Nino said. "Our mentoring, consultation, and after-sales services allow us to offer our customers the support they need when they need it." ✍