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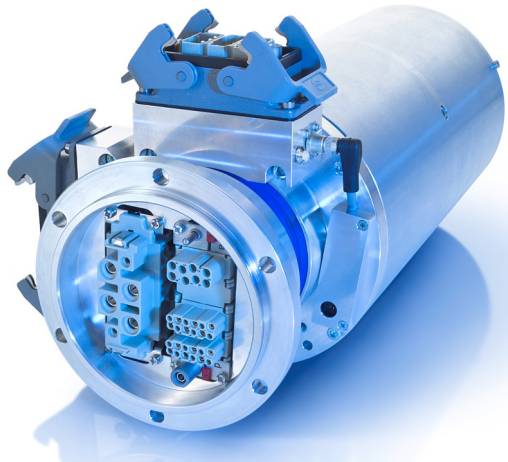
For immediate release

ADSR – Slip Ring with Diagnostic System: World Premiere at EWEA 2014

LEINE LINDE SYSTEMS is presenting the new ADSR, the first slip ring with a diagnostic system for analyzing condition and predicting remaining service life. The new product will be presented in detail at EWEA 2014 in Barcelona from March 10 to 13, 2014.

Service planning made more efficient



Wind turbines, both onshore and offshore, are usually geographically distributed, and are therefore relatively far from service stations. As a result, unexpected servicing is incredibly involved and expensive. Thanks to the new ADSR, wind turbine manufacturers, managers, and operators will benefit from an advanced diagnostic system – fully integrated into a high-quality customized slip ring. The system continuously analyzes the condition of the slip ring and predicts an error before it even occurs. ADSR makes planning wind turbine maintenance more efficient, making it possible to largely avoid unexpected downtimes and the resulting lost yields.

Key functions at a glance

Pitch slip rings, which supply the rotor hub with voltage, signals, and data, are subject to wear due to their design. The ADSR's diagnostic system continuously monitors the contact systems and other key functions of the slip ring, enabling condition-based maintenance for optimized value added. The information and warning messages sent via the diagnostic system are displayed by an LED on the slip ring and made available using network interfaces. Maintenance personnel benefit from a browser-based web monitor that can be opened anywhere in the world to view the current status as well as meaningful reports and analyses. The slip ring communicates data to customizable interfaces using the OPC-UA industry standard – an especially convenient feature.

Sensors to measure a number of parameters

The centerpiece of the ADSR is the integrated sensors for measuring vibrations, the level of voltage and current, number of revolutions, internal and external humidity, and temperature. This systematic monitoring and analysis enables the expected remaining

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service life of the slip ring to be displayed, both in terms of time and revolutions. Having this knowledge in advance makes it possible to use up the slip ring's entire service life. Unforeseeable failures will only rarely occur, which has a positive impact on the efficient operation of wind turbines equipped with an ADSR.

ADSR live at EWEA 2014

Thanks to its unique diagnostic system, the ADSR is a smart solution for condition-based maintenance of slip rings in onshore and offshore wind turbines. The ADSR slip ring is customized to meet specific individual wind turbine design requirements and supplied from one single source. The team from LEINE LINDE SYSTEMS GmbH is giving customers and other interested parties in the wind power industry the chance to experience the new product live for the first time at this year's EWEA in Barcelona from March 10 to 13, 2014. The company will also be on hand at stand E50 in hall 6 to present a number of other innovative solutions for wind turbines.

About LEINE LINDE SYSTEMS

LEINE LINDE SYSTEMS GmbH, with its headquarters in Hamburg, is an independent company in the HEIDENHAIN Group. It offers a wide range of components and systems, which have already been deployed in wind energy applications for many years. Its products include heavy-duty rotary encoders for small and large, fast and slow shafts, and generator and pitch slip rings. What's more, the company offers its FSR, contactless rotary joints, pitch motors for individual pitch control, sensors for condensation, moisture, and temperature measurement, an ice sensor, and prefabricated cables and switch cabinets.

LEINE LINDE SYSTEMS at EWEA 2014 in Barcelona, Spain,
March 10 to 13, 2014, stand E50, hall 6.

You can order photos (jpg, eps) of the ADSR and other products from LEINE LINDE SYSTEMS GmbH by e-mail. Please specify your address and mention "ADSR photo DVD": info@ll-systems.com.

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