INCREASE RELIABILITY WITH SHAFT CURRENT PROTECTION

Challenges Facing the Wind Energy Industry
Wind power has emerged as a leading technology for achieving green, sustainable energy. The use of this technology has grown exponentially worldwide in past decades. Even with this success, the industry is being threatened by extreme maintenance costs due to reliability issues.

Gearbox failures in the nacelle have become the most common breakdown of the wind energy system. The incredible torque demand that a large rotor places on the gearbox is clear; a less obvious– but no less critical– threat is damage to the gearbox bearings caused by electrical discharge machining (EDM).

Normal operation of the generator creates shaft voltages that cause harmful shaft currents. These shaft currents discharge through the unprotected bearings of the generator or coupled equipment. The result is bearing damage that leads to premature failures and expensive repairs.

The Inpro/Seal® Solution
The Inpro/Seal® Current Diverter Ring™ (CDR®) is the latest development in shaft grounding technology. Utilizing proprietary conductive filaments, the CDR safely diverts stray shaft currents away from the bearings by providing a low impedance path to ground. For larger rotating equipment, the Inpro/Seal Multi-Stage CDR is designed to handle high shaft currents–like those present in wind turbine generators.

Supported by our industry-leading service, the Inpro/Seal Multi-Stage CDR is custom engineered to meet the unique demands of the wind energy industry. Split designs are available for easy installation and quick retrofitting on existing equipment. For new installations, specify the Inpro/Seal Multi-Stage CDR to your OEM. The reliable maintenance-free design helps operators achieve their goal of reducing maintenance costs and increasing uptime.

Visit www.inpro-seal.com to contact your local Inpro/Seal representative or request a quote for your Wind Turbine application.