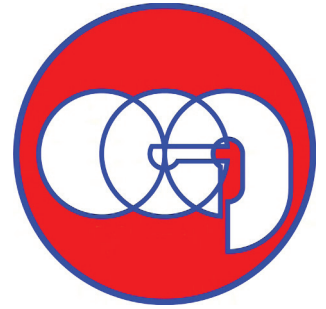


Wind Power Performance With OEG Safety Brakes.

Wind energy sector is in strong and continuous growth, playing a significant role in the world green economy. OEG offers specialized spring pressure safety brakes enhancing wind power performance and ensuring safety even in the most challenging weather conditions.



OEG srl is an Italian company, with over 60 years of experience in designing, developing and producing AC and DC brakes for various industrial sectors, including: wind, packaging, textile, logistics, woodworking machinery, lifting machines. OEG offers customized and exclusive solutions for complete customers satisfaction with about 250.000 brakes produced per year, of which 150.000 for the wind industry, where OEG is an internationally recognized player, with a market share close to 20%.

Wind turbines are complex machines that rely on sophisticated control systems to optimize their performance and ensure safety during operation. Two key components in these systems are the yaw and pitch control mechanisms, which are responsible for adjusting the orientation of the turbine relative to the wind and the angle of the blades, respectively.

OEG brakes are ideally suited for integration with the electric motors used in these systems, offering the necessary safety, reliability, and performance required by the wind energy sector.

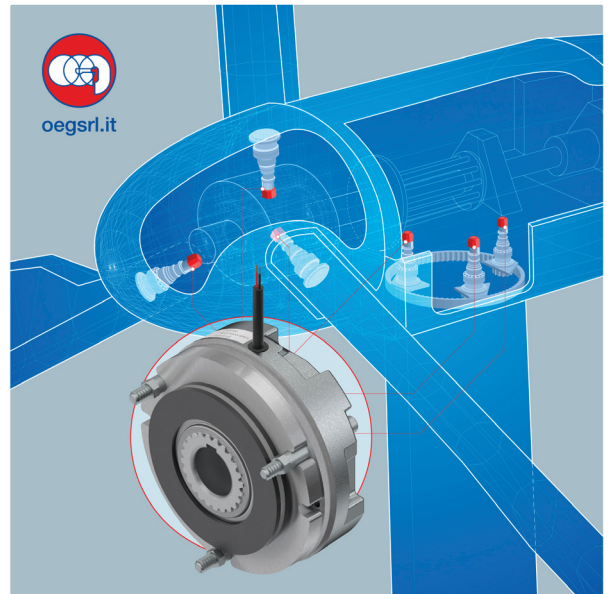
How OEG Brakes enhance Yaw and Pitch Control Systems

1. Reliable Holding Force: Wind turbines



are exposed to the most challenging weather conditions, including high winds that exert significant forces on the nacelle and blades. OEG brakes are designed to provide a strong and reliable holding force, to be kept within a set of values, to avoid the breakdown of the pinion and ensuring that the nacelle and blades do not crack under high loads. This is particularly important in the yaw system, where brakes must hold the nacelle in place, under normal operating conditions, but, more importantly, must allow slipping in high winds.

2. **Precise Stopping Power:** In addition to providing a reliable holding force, OEG brakes offer precise stopping power when needed. In pitch control systems, this is crucial for ensuring that the blades can be stopped or held at the correct angle to optimize energy capture or prevent damage during extreme weather conditions. The brakes' ability to control motion quickly and accurately ensures that the pitch control system operates safely and efficiently.
3. **Durability and Low Maintenance:** Wind turbines are often located in remote or hard environments, such as offshore wind farms, where maintenance can be difficult and costly. OEG spring pressure safety brakes are designed for durability and long-term performance, with minimal maintenance requirements. The use of high-quality materials and



robust construction ensures that the brakes can withstand the hard conditions commonly encountered in wind turbine applications, including exposure to moisture, dust, and extreme temperature.

4. **Customization to Meet Client Specifications:** Every wind turbine design is unique, and the specific requirements for yaw and pitch control systems can vary depending on the size and type of turbine, as well as the environmental conditions in which it operates. OEG offers customizable braking solutions that can be tailored to meet the specific technical specifications of each client. Whether the client requires a particular braking force, size, or actuation method, OEG can provide a solution that integrates seamlessly with the electric motors used in yaw and pitch control systems.

For more information, kindly contact OEG:

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