

El Norte de Castilla

Arborea and Iberdrola present their innovations in industrial inspection with drones



An operator drives a drone at the foot of a generator.

The use of this technology allows to evaluate «in minutes» the condition of the generator blades and thus extend its useful life

Iberdrola presented yesterday with Arborea Intellbird, the Salamanca company specialized in drone inspection technology in which the electric company participated, the technological advances and results of the international wind turbine blade inspection operation campaigns, in which Iberdrola is a «pioneer».

This was stated by the energy entity after this release at the Iberdrola Campus in San Agustín de Guadalix, which has become «the center of innovation in industrial operation with drone» by hosting the international Digital Summit event. There, the manager of technical management of the exploitation of the Iberdrola Renovables parks in Spain, Ignacio Olmeda, and the CEO of Arbórea, Carlos Bernabéu, showed the latest technology in drones and analysis software to «a large international public» applied to industrial inspection, developed in collaboration between both companies.

These platforms, which integrate drones, sensors and software, allow industrial inspections to be digitized with improvements in efficiency, safety and costs, according to Iberdrola.

Thus, in addition to receiving a demonstration of inspection and detection of internal defects on a real shovel simulator installed by Arbórea on the Iberdrola Campus, participants in the event learned the results of the international wind turbine blade inspection campaign carried out in 2016. These works have led to the *Aracnocóptero* (device used in these tasks) throughout the Spanish geography and the company's Mexican wind farms.

Advantages

With the use of this technology «pioneered» by Iberdrola, the company achieved a saving of approximately 80% during the last campaign, because the technology allows to know if there are shovels at risk «without visible symptoms» and allows to avoid damages with a predictive intervention.

In addition, the new advances allow, in just seven minutes of flight, the data collection to generate an internal radiography of the wind turbine blade, detect its internal damages and quantify them automatically with the help of a series of computerized vision systems and automatic detection.

These systems have been recently implemented in the software developed by the Salamanca company. All this «allows mapping internally and externally, with pinpoint accuracy, blades that can reach 75 meters in a few minutes and are subjected to very harsh conditions throughout their useful life».

Likewise, the use of drones allows the blades to be managed «properly», which are critical elements of a wind turbine to enable its extension of useful life.

[Link to original](#) (Spanish)