



Services and technology for wind industry





GDES Wind has quality service as its strategic mission, working daily in close contact with the needs of its customers. On both the operational and technical levels it pursues excellence in the quality of its services, applying the latest composites and diagnostic tools technologies.



Effectiveness through optimization

Main GDES Wind differentiating aspects are:

- High technical capability
- In-depth understanding and experience of all blade technologies existing on the market
- Independence in relation to technical criteria
- Flexibility, versatility and possibility of working in widely differing national and international environments
- Rapid response to the customers in emergency situations its team of people to be its most valuable asset. Throughout the company's history, the average seniority of its employees has increased constantly, and this lengthy service implies a bonus in terms of know-how and experience that the customers value very highly.
- Environmental commitment



Facilities

Repair and transformation factory at As Pontes de García Rodríguez (Galicia - Spain)



- 15.000 m² extension
- 3.200 m² workshop
- Climatized
- 4 travelling cranes
- Full equipped
- Directly connected with AG-64
- 30 minutes from Ferrol harbor
- 50 minutes from A Coruña or Santiago airport

R&D

GDES Wind uses and develops the very latest composite materials, blade access methods and inspection techniques. Throughout the company's years of activity, innovative technical solutions have been developed for repairs, which have served to avoid important costs associated with the lowering of rotors or blades, and even replacement, with blades initially considered unusable having been repaired.

GDES Wind will promote **R&D** in collaboration with the **GDES INNOVATION**. Work is currently under way on the Blade Inspection Project. Throughout its over 85 years of history, GDES has always believed in innovation as a sign of identity. Thanks to its commitment to research, development and innovation, GDES has managed to position itself at the cutting edge of technological developments adapted to specific projects and needs of the energy sector.

At GDES, we believe that technological development and innovation are essential to grow and maintain leadership in our market, to respond to the constantly changing environment of today, and to drive continuous improvement in our core business. Our main objective is to continue growing as an innovative, dynamic, and proactive company that specialises in meeting the needs of our clients with solutions based on applied innovation.

The company is also present in all the national and international forums for debate in the fields of wind energy maintenance and composite materials: Power Expo in Spain, Ewea in Europe and Awea in the USA, and participates in the Maintenance Working Group of the Wind Energy Business Association.



Services

Maintenance

The ultimate objective is to optimize blade maintenance, minimizing life cycle costs and maximizing the energy produced.

GDES Wind possesses wide experience of and the capacity to manage any type of auxiliary hoisting device, and several of our technicians have the required certifications to perform works at height with rope access.



Inspections

- During the production process
- Inspections prior to assembly
- Inspections in the field, from the ground by means of telescopes.
- External and internal inspections at height
- Thermography analysis
- Phased-array ultrasonic analysis

Repairs

- Repairs in the field
- Repairs in the factory

Supply of materials

Other services

- Blade logistics
- Parts and materials logistics
- Measurement of vibrations in rotors and optimization of pitch angles and dynamic rotor balancing
- Blade aerodynamic system retrofit
- Cutting, scrapping and management of unusable
- Trainings (blade repairs and inspections, composite materials, etc.)
- Consulting and Appraisals (e.g. remote real-time diagnosis of blade problems, possible solutions or decisions regarding machine shutdown based on information and photos provided by our customers)



GDES Wind manufactures composite parts for wind generator assembly, such as rain deflectors, covers, different aerodynamic elements, etc., at its premises and using in-house procedures. The manufacturing techniques are adapted to the type of part in order to achieve the highest levels of effectiveness in terms of cost while meeting all the design requirements. The techniques normally used for these parts are applied: infusion, RTM-light, manual rolling, etc.

The company also assembles these parts on the generator blade wherever this might be necessary: blade factory, port, wind farm, customer facilities, etc.

GDES Wind has recently integrated the resources, knowledge and background of a company with more than 20 years of experience in composite manufacturing for the wind energy industry (C.M.C.), supplying components for the main companies in the wind energy sector.

Services

Manufacturing of wind generator composite parts



Know-How



Background History

GDES Wind, (up to 2015 **Sálvoravento**) was established in 2004 as one of the first Spanish independent companies in the field of blades and composite materials for the wind energy sector, fundamentally in maintenance but also in design, manufacturing, inspection, auditing, retrofits and other areas.

In March 2012, **Sálvoravento** was integrated in the GD Energy Services Group, a Spanish industrial group with wide experience in providing maintenance services to the energy industry and with a global presence (France, Mexico, Italy, Brazil, Qatar, Singapore, United Kingdom etc). In April 2015, **Sálvoravento** changes its name to **GDES Wind**.

Geographical presence

Since its beginnings, **GDES Wind** has had an international dimension, carrying out its activities naturally on the Spanish, Portuguese and French markets. Now however, it has undertaken projects in 36 countries (on 5 continents) and possesses the logistical resources required to perform projects anywhere in the world.

GDES Wind has 3 operating bases in Spain (2 in A Coruña – Culleredo and As Pontes (workshop > 3,000 m²)- and one in Albacete.

GDES Wind, Inc. (offices in Denver, Colorado), **GDES Wind SAS** (offices in Bollene, France) and **GDES Eólico do Brasil** (offices in Sao Paulo) are subsidiaries of **GDES Wind S.L.**, that combined all of its values and know-how with a knowledge base, personnel, experience and focus that are more local to the US, French and Brazilian wind market respectively.

For specific projects, temporary bases or installations are established where necessary, adapted in size and structure to each project.

Quality and Safety

GDES Wind counts on certification by one of the most prestigious bodies in the wind energy sector: DNV-GL (Det Norske Veritas-GL Global Service).

- Quality System in accordance with the ISO 9001:2015 Standard.
- Environmental Management System in accordance with ISO 14001:2015.
- Prevention Management System in accordance with ISO 45001:2018.



Human Capital

GDES Wind pays special attention to its most valuable asset, the people who make up the organization and play a key role in the day-to-day development of the company and the trust placed in it by its customers.

GDES Wind undertakes external and in-house training in order to remain at the forefront in the latest technologies and prevention measures affecting its activity.

Special mention should be made of the company's constant and growing creation of jobs over the years and the added value of its low personnel turnover rates.

GDES Wind collaborates with the Prodis Foundation in the interests of incorporating handicapped people into the job market.



Experience

GDES Wind is a
GDES company

GDES Wind works with the most important companies in the sector at a global level, both technology firms, blade manufacturers and major wind energy developers and all other companies, entities or institutions with activities relating to wind turbine generator blades and composites.

The flexibility and capacity to adapt of the organization allow it to collaborate in the most diverse environments on the 5 continents where it has carried out widely varying projects, from major retrofits to minor day-to-day consultations and solutions.

Member of





Global Presence



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