



WIND

O&M / STATUTORY INSPECTIONS

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A single technical partner

For Wind O&M and Statutory Inspections

Hiperia supports wind farm owners, asset managers and operators with specialist safety inspection and maintenance services.

Our technical expertise covers the entire operational lifecycle of the turbine, from the inspection of access and safety systems to the scheduled management of maintenance activities, with one clear objective: protecting people while keeping assets efficient, available and productive.



Our experience in numbers

+20

**Clients in the
wind sector**

+3K

WTGs Inspected

+12K

Interventions

Operating in the wind energy sector requires multidisciplinary expertise, rapid response capabilities and an in-depth understanding of the conditions in which both people and equipment operate. Hiperia brings these capabilities together in a service model tailored to the operational requirements of each wind farm.

Qualified technicians, structured procedures and comprehensive operational oversight enable the coordinated management of safety, maintenance and performance. From individual inspections to the planning of ongoing maintenance programmes, every activity is designed to minimise critical issues, reduce downtime and support clients in making informed technical decisions.



O&M

Maintenance and technical support for wind farm efficiency

Hiperia provides Operation & Maintenance services for wind farms, carrying out scheduled, corrective and diagnostic maintenance activities on wind turbines.

From maintenance planning and troubleshooting to component repair and restoration, all activities are performed by specialised technical personnel and organised according to the operating conditions of the wind farm and intervention priorities.

Our services are designed to preserve turbine reliability, minimise downtime and ensure long-term operational continuity and asset performance.



Preventive Maintenance

Preventive maintenance keeps component condition under control and reduces the likelihood of unexpected failures.



Activities are scheduled according to maintenance programmes, operating hours, operating conditions and the turbine's maintenance history.

Inspections, adjustments, tightening, lubrication and scheduled component replacements are organised to make the most effective use of planned downtime and minimise the impact on energy production.

Corrective Maintenance

When a fault occurs, the speed and accuracy of the diagnosis are key to ensuring an effective response. Hiperia supports clients in identifying the root cause, defining the required actions and restoring full turbine operation.



Corrective maintenance may include:

- fault finding and analysis;
- inspection of affected components;
- replacement or repair of damaged parts;
- post-maintenance functional testing;
- updating technical documentation;
- preventive recommendations to reduce the risk of recurrence.

Advanced Inspections and Analysis

Maintenance activities can be complemented by advanced inspection and diagnostic techniques to provide deeper insight into component condition, identify anomalies and support maintenance planning.

Visual and Instrumental Inspections

Assessment of components, surfaces and blades through visual inspections and, where required, dedicated instrumentation, with structured collection and documentation of findings.

Thermographic Analysis

Identification of thermal anomalies associated with overheating, faulty connections, overloads or abnormal behaviour of electrical and mechanical components.

Vibration Analysis

Monitoring and assessment of vibrations in rotating components to detect abnormal conditions potentially associated with wear, imbalance or misalignment.

Combining different diagnostic techniques provides a more comprehensive understanding of turbine condition and supports maintenance decisions based on objective evidence.





Performance & Reporting

Data collected during monitoring, inspections and maintenance activities are transformed into actionable information for the technical management of the wind farm.

Reporting provides a clear record of completed activities, enables the evolution of anomalies to be tracked and helps assess the impact of maintenance activities on availability and performance.

The result is a stronger technical foundation for planning investments, downtime and improvement actions.



Statutory Inspection

Periodic inspections for wind turbine safety

Hiperia performs periodic inspections of access, lifting and protection systems installed in wind turbines, assessing their integrity, functionality and safety conditions.

Activities cover lifelines and fall-protection systems, ladders, service lifts, hoists, descent devices and anchor points. Inspections are carried out by qualified technical personnel in accordance with applicable inspection intervals and requirements.

Each inspection is documented to ensure full traceability, identify potential anomalies and define the actions required to maintain safe operating conditions.

Complete inspection process

Preliminary Assessment

Review of the system, available documentation and applicable inspection deadlines.

On-Site Inspection

Visual, functional and technical inspections carried out by qualified personnel.

Anomaly Classification

Identification of critical issues, classification of anomalies and definition of the corresponding priority level.

Corrective Action

Maintenance, adjustment or component replacement, where required.

Reporting

Documentation of inspection findings, activities performed and any further actions required.



Lifelines and Anchor system

Hiperia carries out scheduled and extraordinary inspections and maintenance on vertical lifelines, handrails and anchor systems.

Inspections assess component condition, fastening integrity, installation stability, connecting elements and any conditions that could compromise system effectiveness.

Activities also include the inspection of anchor points installed inside the turbine or on top of the nacelle, including those covered by UNI 11578:2015 – Type A.

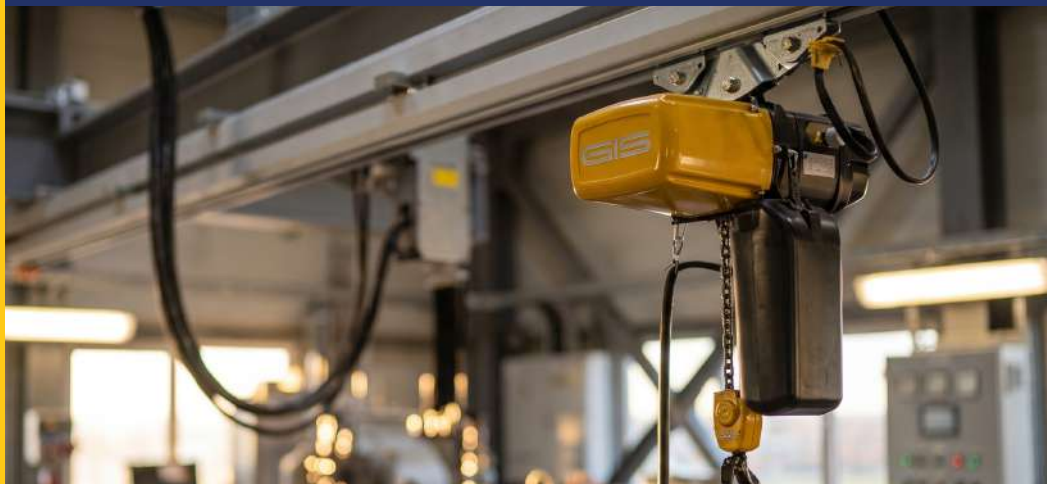


Chain and wire rope hoists

Hiperia performs inspections and maintenance on hoists used to handle equipment and components inside wind turbines.

Inspections cover lifting mechanisms, braking systems, wire ropes or chains and the main safety devices.

Our operational expertise covers equipment from a range of manufacturers, including Liftket, GIS and Vicinay Cemvisa, as well as other brands available on the market.



Ladders and access system

Fixed ladders are one of the primary means of accessing the internal areas of a wind turbine.

Rungs, rails, spacers, joints and anchor points are inspected to verify their integrity, stability and correct installation.

Particular attention is given to points subject to repeated mechanical stress and to any conditions that could compromise safety during ascent or descent. Where necessary, inspections are complemented by maintenance activities and the repair or restoration of affected components.



Emergency descent devices and service lifts

Hiperia performs periodic inspections of vertical transportation systems installed in wind turbines.

For emergency descent devices, inspections cover ropes, descent mechanisms, vacuum systems and components subject to deterioration.

For service lifts, traction and braking systems, safety devices and key functional components are inspected.

The objective is to identify wear and anomalies at an early stage, ensuring system reliability both during normal operations and in emergency situations.

