

V3 NAMIBIA

INSPECTION / SURVEY / INTELLIGENCE

COMPLETE WIND BLADE SERVICES

COMPLETE WIND BLADE INTELLIGENCE.

External drone inspection. Internal crawler inspection. LPS testing. One coordinated partner solution for clearer maintenance and portfolio decisions.

ONE PARTNER. THREE INSPECTION LAYERS.

EXTERNAL BLADE CONDITION

INTERNAL BLADE CONDITION

LIGHTNING PROTECTION SYSTEM



IN PARTNERSHIP WITH

GLOBAL TECHNOLOGY
AFRICAN DELIVERY



PARTNER-DELIVERED CAPABILITY

ONE PARTNER. COMPLETE BLADE VI

V3 Namibia coordinates local delivery with Clobotics Wind Services technology, systems and global blade-inspection experience.

01 EXTERNAL

Autonomous high-resolution capture across all blade surfaces.

- Annotated visible findings
- Severity-based review
- Repair-scoping evidence

02 INTERNAL

Technician-led inspection combined with KIWI crawler coverage.

- Internal surfaces and shear webs
- Lightning cables and connections
- Better access and documentation

03 LPS

Electrical continuity testing by drone or rope, as the scope requires.

- 4-wire resistance measurement
- OEM-aligned assessment
- Measured results and follow-up

CLOBOTICS GLOBAL TRACK RECORD

115,000+

TURBINES EXTERNALLY INSPECTED

14,000+

TURBINES INTERNALLY INSPECTED

44,000+

TURBINES WITH LPS INSPECTION

Global track-record figures supplied by Clobotics Wind Services. Actual scope and cycle times depend on turbine type, access, weather and site conditions.

EXTERNAL BLADE INSPECTION

CAPTURE EVERY SURFACE. PRIORITISE WHAT MATTERS.

Autonomous high-resolution capture and structured analysis turn visible blade condition into evidence for maintenance planning and repair scoping.



CAMERA
THE EYES OF THE OPERATION
RECORDS DATA

STABILISES T

IBIS EXTERNAL CAPTURE

**BUILT FOR SPEED, COVERAGE
AND CONSISTENCY**

- LiDAR-supported autonomous capture with consistent stand-off control
- All three blades and 12 surfaces captured in one positioning
- AI-assisted analysis with expert review and blade-location references

61 MP CAMERA	12 BLADE SURFACES	15-22 TYPICAL MINUTES
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LEADING EDGE EROSION
Condition evidence for repair scoping.



SURFACE DEGRADATION
Visible pattern documented for follow-up.



LOCAL INDICATION
A defined observation for technical review.

Cycle-time and equipment figures are Clobotics specifications; actual performance depends on turbine type, weather and operating conditions.

INTERNAL BLADE INSPECTION

SEE FURTHER INSIDE THE BLADE.

Combine hands-on specialist checks with KIWI crawler capture to extend reach, improve coverage and build a clearer internal condition record.



TECHNICIAN PLUS CRAWLER

TWO METHODS. ONE COMPLETE RECORD.

- Hands-on inspection and physical checks by trained technicians
- Accessible internal surfaces, shear webs and structural areas
- Lightning cables and connections checked within the agreed scope
- 26 MP tilting camera, front camera and 360-degree flood lighting
- Crawler access toward the tip and through narrow areas
- Raven capture with structured IRIS reporting

CLOBOTICS INTERNAL INSPECTION EXPERIENCE

14,000+

TURBINES INTERNALLY INSPECTED WORLDWIDE

01 ACCESS & PHYSICAL CHECK

02 CRAWLER SURFACE SWEEP

03 BACK-OFFICE REVIEW

04 RAVEN / IRIS REPORTING

Internal coverage and cycle time are turbine-type dependent and subject to access, safety and agreed inspection methodology.

LIGHTNING PROTECTION SYSTEM TESTING

TEST THE PROTECTION SYSTEM. NOT JUST THE SURFACE.

Visual marks can indicate where to look, but only electrical testing can assess continuity. LPS testing is therefore scoped and reported as a dedicated service.



MEASURED CONTINUITY

A DEDICATED ELECTRICAL TEST

Both methods use four-wire resistance measurement, with results assessed against the applicable manufacturer requirements and agreed inspection scope.

44,000+

TURBINES INSPECTED FOR LPS CONTINUITY WORLDWIDE

Clobotics global track record

DRONE-BASED LPS TESTING

- Clobotics Hummingbird payload on DJI M350
- Controlled electrical contact with the blade receptor
- Four-wire low-resistance measurement
- Typical cycle of 25-40 minutes per turbine
- Supports inspection heights up to 250 m
- Avoids routine technician exposure at height where suitable

ROPE-ACCESS LPS TESTING

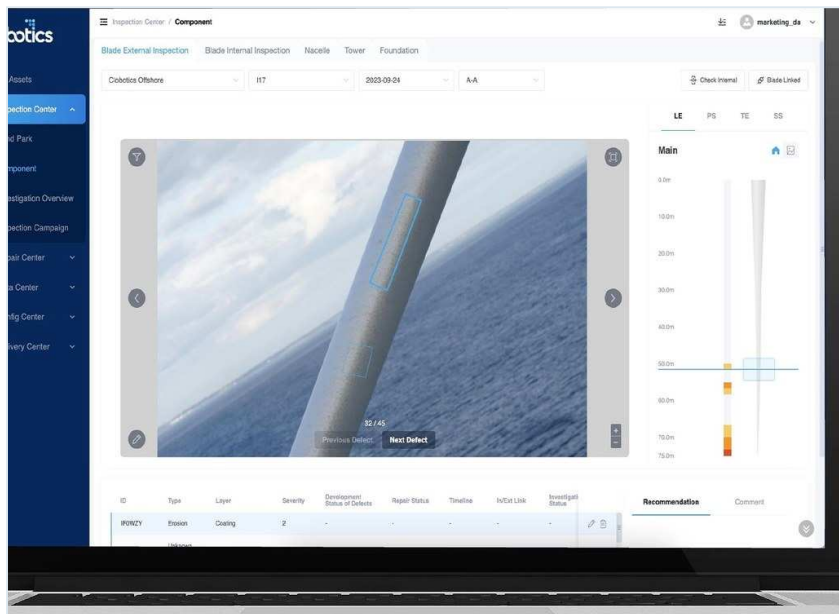
- Full-system test aligned with OEM requirements
- Digital Low Resistance Ohmmeter readings
- Four-wire low-resistance measurement
- Typical cycle of approximately 4 hours per turbine
- Results benchmarked against manufacturer specifications
- Repair recommendations and IRIS reporting

Method, cycle time, wind limits and access approach are confirmed during scoping and depend on turbine type, OEM requirements and site conditions.

IRIS DIGITAL REPORTING

FROM INSPECTION DATA TO PORTFOLIO DECISIONS.

A cloud-based evidence environment connects image capture, expert review, structured findings and fleet-level reporting.



ONE SOURCE OF TRUTH

IRIS PORTAL OUTPUTS

- Fleet, wind farm, turbine and blade views
- Measured, labelled and categorised defects
- Expert-reviewed results and recommendations
- Custom PDF and Excel exports
- Repair campaign planning and monitoring

CLIENT-READY. NOT AN IMAGE DUMP.

FIELD-TO-DECISION WORKFLOW

01 SCOPE

Objective, turbines, method and outputs.

02 CAPTURE

External, internal or LPS field data.

03 ANALYSE

Machine-assisted processing and expert review.

04 PRIORITISE

Location, severity and next-action logic.

05 REPORT

IRIS evidence and client-ready exports.

A FOCUSED FIRST STEP

START WITH A PILOT. SCALE WITH CONFIDENCE.

Send the core site inputs and we will return an initial scope, assumptions, deliverables and budgetary proposal within 48 hours.

SEND THESE SIX INPUTS

- | | |
|---|---|
| 1 Wind farm or site name and location | 4 Inspection objective and preferred timing |
| 2 WTG make, model and turbine count | 5 Known findings or recent inspection history |
| 3 Required service: external, internal, LPS or combined | 6 Required outputs and decision stakeholders |

INITIAL COMMERCIAL RESPONSE

ONE SCOPE. THE RIGHT INSPECTION LAYERS.

48 HRS

We will confirm the recommended method, mobilisation assumptions, deliverables, timeline and budgetary pricing.

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