

TM



KNIGHT &
CARVER
WIND GROUP

WIND BLADE SERVICE PLAN



International
Organization for
Standardization



Objectives

- Increase availability
- Minimize downtime
- Reduce/Eliminate large repairs and replacements
- Increase productivity

Overview

- Inspect blades during lowest production month
- Document and report damage found
- Discuss repair plan
- Repair all damage found
- Repair leading edge erosion
- Give priority service for unscheduled repairs

Choosing the Blades to Inspect

- Blades reported noisy
- Blades observed with suspicious marks or cracks
- Low production machines
- Turbines suspected of lightning hits
- Random sampling

Process

- Service is scheduled months in advance to take advantage of low production time of year, good weather and availability of crane
- Technicians arrive with equipment, tools, and repair materials
- Initial meeting confirms list of suspect turbines
- Inspection schedule confirmed with site manager
- Technicians follow safety practices locking down turbine and inspecting blades
- Report is discussed with site manager
- Repairs take place immediately
- Documentation is given to site manager

Inspection Methods

- Visual inspection
- Tap test
- Infrared imaging of suspect areas
- Photography
- Lightning system continuity check
- Inspection documents produced

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