



Your Premier Blade Service Company



Engineering Services

MFG Energy Services Has a Team of Engineers to Serve Your Needs

Root Cause Analysis (RCA):

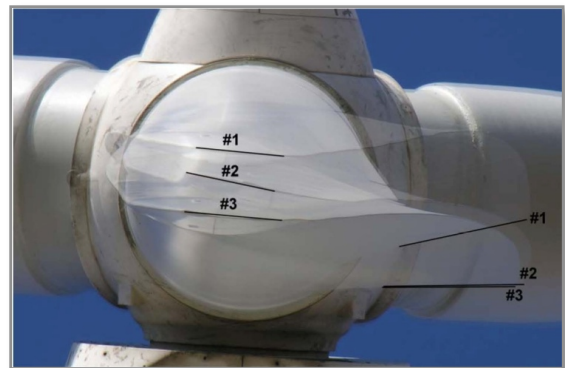
Third party analysis and conclusions

- ▲ MFG ES engineer works with the customer to gain all the facts of the calamity
- ▲ Independent evaluation
- ▲ Formal report is produced
- ▲ Estimate for repairs if needed

Aerodynamic Balancing:

Pitch problems solved

- ▲ Blades are producing varying power
- ▲ Uneven blade profiles
 - Built wrong
 - Repairs
 - Erosion
- ▲ Coning angle errors
- ▲ Pitch angle varies from blade to blade



Misaligned blades are revealed

Dynamic Rotor Balancing:

Analysis and correction of mass imbalance

- ▲ Mass imbalance can cause excessive main bearing wear and gearbox problems.
 - Moment varies due to uneven blade masses or distribution
 - Hub imbalance or flange errors
 - Are the tips of the blades equidistant?
 - Bent shaft
 - Blades have absorbed oil or water



Industry accepted analysis equipment