Horvath Research TURBINE HEALTH ASSESSMENT

IMPACT TESTING



Rapid turbine blade impact testing to identify cracked blades using natural frequency shifts.

A simple hammer impact will excite the natural frequencies of the turbine blade. The blade will ring with its unique frequencies those are closely related its physical conditions. Cracks/Flaws will shift the blade natural frequencies. It is a simple and fast way to identify cracked turbine blades. Similar testing could identify blade group frequencies (axial, tangential and twisting) to avoid resonance conditions of new and retrofitted turbines.

Applications

- Rapid Health Assessment
- 120Hz Exclusion Zone of Blade Groups
- Quality Assurance
- Specification Verification
- Blade Natural Frequency Scattering
- Turbine Repair Check

Industries

- Electric Power Generation
- Aviation and Aerospace
- LNG Compressors

Measured Modal Parameters

- Natural Frequencies
- Relative Damping Ratios
- Mode Shapes





More Information Email: rhorvath@HorvathResearch.com www.HorvathResearch.com

