

Vibration & Thermography Monitoring.

Consultancy Services @ KLS VEDIT Haliyal,
Department of Mechanical Engineering in
Association with Diagnostic Engineers, Bangalore.

OUR SERVICES

- **PROTECTION OF ROTATING EQUIPMENT'S.**
We take all the risks regarding your investments so you remain protected.
- **INNOVATIVE METHOD'S.**
We help you in monitoring the machines with easy of success.
- **SMART MANAGEMENT**
Our team of professional people will help you to manage your machines.



Mr. Madhusudan N
Vibration Analyst, ISO CAT II,
Diagnostic Engineers, Bangalore

CONSULTANT SPECIALIST



Scan QR code for more details

CONTACT US!

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In Association with

**Karnatak Law Society's
Vishwanathrao Deshpande Institute of
Technology, Haliyal-583125.**

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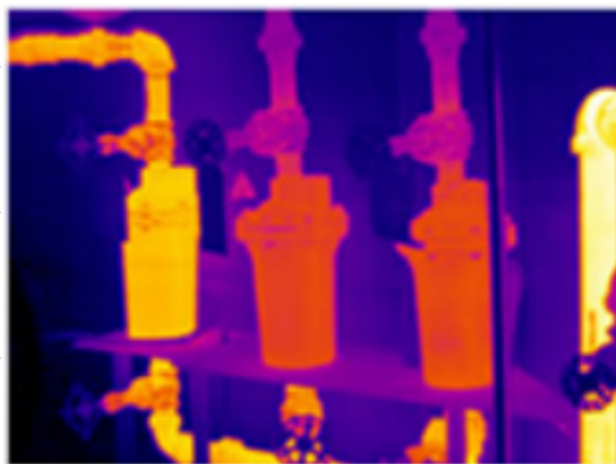
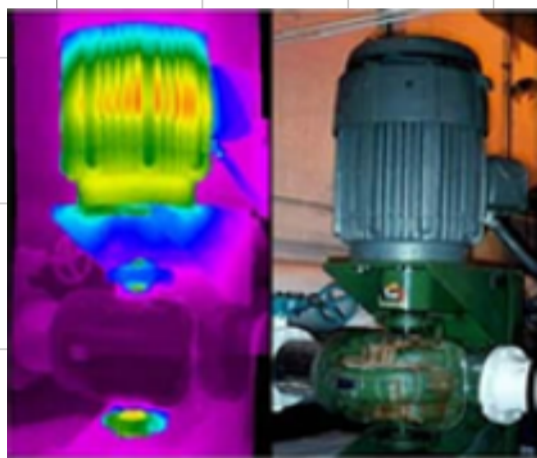
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Why Vibration Monitoring ?

Vibration monitoring is one of the most effective ways to detect and prevent equipment failure or downtime. It can screen most faults including imbalance, misalignment, looseness, late-stage bearing wear and providing precipitous warning of impending failure.

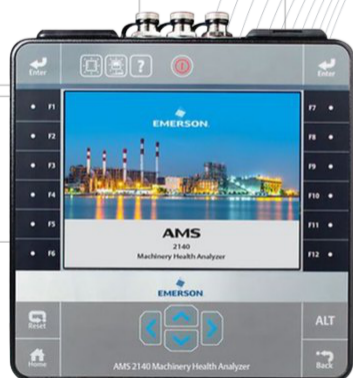
Why thermography ?

Thermography is an excellent condition monitoring tool to assist in reduction of maintenance costs of the system. This technique allows for the monitoring of temperatures and thermal patterns while the equipment is online and running under full load. Most mechanical equipment has allowable operating temperature limits that can be used as guidelines. Infrared Thermal Imaging can be used on a wide variety of equipment including pumps, motors, bearings, pulleys, fans, drives, conveyors etc. Infrared Thermal Imaging enhances a company's ability to predict equipment failure and plan corrective action before a costly shutdown or equipment damage.



Handling of Insurments used for Plant vibration monitoring:

Hands on experience in using data collectors/vibration analysers like DI 2200, DI 440, Data Physics 4 channel kit, CSI 2140 Machinery Health Analyzer & SPM bearing analyser. The data collection on rotating equipments include frequency spectrum analysis, time waveform, phase analysis, overlay plots, orbits, coast up and coast down data, shaft center line plots, bump test.



Emerson CSI 2140



Model: Fluke Ti-400



DI 2200/440



SPM Bearing Analyzer



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Why Our Services ? Because we have mentor of 21 years of experience in,

- 1. Vibration Data collection, Data interpretation, diagnosis and trending of rotating machines**
- 2. Hands on experience on usage of vibration data collectors for Vibration Monitoring of mechanical equipments.**
- 3. Rotating machines on-site Balancing.**
- 4. Trouble shooting of rotating machines.**
- 5. Natural frequency measurements of turbine blades.**
- 6. Sound spectrum analysis.**
- 7. Thermal Analysis.**

Responsibilities performed till date,

- 1. Schedule based Vibration Monitoring of Rotating equipment's (Annual maintenance contract) for auto, oil refineries paper mills, pharmacy and process industries.**
- 2. Vibration analysis and on-site balancing of turbine-gearbox-generator assembly at power plants.
Handled several TG sets starting from 2 MW to 150 MW sets.**
- 3. Vibration studies and on-site balancing of paint shop blowers, fans, stand-alone generator assembly, motor assembly, Horizontal machining centre, vertical machining centre.**
- 4. Hands on experience in Analysis like Equipment's Unbalance, Misalignment, Mechanical Looseness, Bearing failures, Blade pass-Vane pass, Gears & Belt related problems.**
- 5. Bump tests performed on rotating machinery components like couplings, turbine blades, pulleys etc to know the resonance band/critical speeds.**

Major assignments handled till date,

- 1. Vibration studies and diagnosis of 2X25 MW gas turbine power plant at BAFA, Bahrain.**
- 2. Vibration measurements and on-site balancing of high speed spindles which runs at 30000 rpm
Blade natural frequency tests for 150, 230 MW turbines at National Thermal Power Corporation India.**
- 3. Shaft failure analysis and investigation for HCL technologies.**
- 4. Handled several vibration studies and on-site balancing assignments for Toyodenki power systems (In Collaboration with Toyodenki Japan) high capacity generators starting from 8 to 35 MW sets.**
- 5. On-site balancing of 54 ton generator rotor-motor assembly at Central Power Research Institute, Bangalore, India.**



6. Vibration measurements and trouble shooting of 30 MW Gas TurbineGearbox-compressor train, Doha offshore at one of the leading Petroleum refinery in Qatar.
7. Vibration studies and analysis of 2 X 2.5 MW Hydro machines for Boving Fouress at Srilanka & Vibrationstudies and on-site balancing of 60 MW Hydro generator at Sabarigiri power station, India (First of its kind high capacity hydro station in India).
9. Rotor dynamic support for handling vibration problems in a 35 MW TG set at one of the sugar mills(Software used: XL Rotor).
10. Failure investigation and reporting of a Demag compressor blades at Tata Steels, Jemshedpur, India
- 11.Vibration studies and on-site balancing of motor-generator-flywheel assembly. Weight of the flywheel was 16 tons and runs at 1500/1800 rpm. This machine was first of its kind developed in India for short circuit testing and analysis.
- 12.Corporate training on vibration basics and condition monitoring at Caledonian College of Engineering, Oman.

Our Customers



Our Team

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