

PREDICTIVE SERVICES



Schulz Group-Maine Divisions

Your Cost Effective Solution to Predictive Maintenance

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Avoid Catastrophic Failures and Reduce Unexpected Downtime

Predictive Maintenance can help you avoid catastrophic failures and reduce unexpected downtime by identifying machines near failure or by monitoring a machine's changes over time.

Vibration Analysis

Benefits of Vibration Trending & Analysis

- Diagnose imbalance, misalignment, and bearing issues
- Major reduction in spare parts due to better data on machine health
- Reductions in emergency work orders and overtime
- Improve equipment reliability and uptime
- Prevent catastrophic failure
- Improve machine safety levels

Vibration Analysis Services

- In-house or contract PDM program implementation including periodic & continuous monitoring
- Examine machinery fault frequencies & rotating component defects
- Collect vibration data on critical machines
- ASNT Level 2 Vibration Analyst



Above: Level 2 Vibration Analyst conducting a vibration survey on a vertical motor in-house for repairs. Above right: CSI 2130 dual channel vibration analyzer:

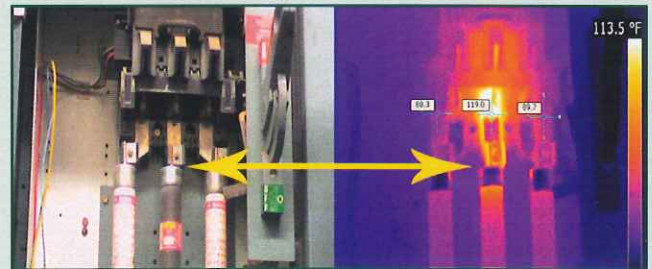
In-Place Dynamic Balancing

Benefits of Dynamic Balancing

- Compensates for assembly tolerances, unbalance of pulleys, gears, coupling, & other added components of new or overhauled machinery
- Applicable on all rotating equipment
- Increases bearing life
- Reduces vibration
- Minimizes structural stress



Right:
On-site Dynamic Balancing of a large I.D. fan at a power plant



Digital Image

Infrared Image

Infrared Thermography

Benefits of Infrared Thermography

- IR is a non-invasive application which can provide significant warning of potential problems with critical equipment
- Identify overheating electrical connections and avoid catastrophic failure

IR Applications

- Power distribution and control cabinets
- Electrical and mechanical heat related defects
- Loose/corroded connections
- Unbalanced Loads/Overcurrent conditions
- Motor hot-spot testing
- Process problems due to heat loss
- Infrared IR window installations
- Transformers and power lines

Coupling Laser Alignment

Benefits of Laser Alignment

- Properly aligned equipment runs smoother & more efficiently, resulting in fewer breakdowns
- Vibration reduction through laser alignment
- Ultimately increases production and profits
- Accurately measure misaligned units
- Hi-lite and correct hidden soft-foot alignment defects
- Save time with precision pre-cut shims
- Machine train precision alignment
- Fast and accurate machine installation through precision alignment



Right: Laser Alignment being performed prior to operational load testing