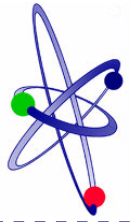


Are your *maintenance costs* too high?



Integrated Predictive Maintenance Services



- n Motors
- n Turbines
- n Pumps
- n Fans
- n Bearings
- n Gearboxes

Call **C.W. Silver** now at **801-366-4100** to start a predictive Maintenance program today!

C.W. Silver Industrial Services can integrate a Predictive Maintenance program for you to:

- n Keep equipment running as smoothly as possible
- n Avoid the risk of premature failure
- n Insure a reliability based maintenance program
- n Avoid production loss

The Economic Consequences of an ineffective maintenance program:

- Loss of production
- Catastrophic destruction
- Inefficient manpower planning
- Excess parts inventory
- Insurance carrier's risk assessment
- Quality assurance & control
- Safety



Using this device can greatly improve maintenance

Is unexpected downtime causing you problems?

C.W. Silver's customized Predictive Maintenance program includes:

- n **Machinery Vibration Analysis** (performed with motor on-line) can determine:
 - a. Rotor Mechanical balance.
 - b. Motor housing/bearing alignment & bearing problems.
 - c. Electrically excited problem.
 - d. Motor resonance & structural problems
- n **AC Induction Motor Analysis**
(performed with motor on-line under normal load) to determine:
 - a. Rotor bar/cracked rotor end ring/high resistance joints and rotor eccentricity.
- n **Infrared Testing of Electrical Panels & Motor**
(performed with equipment on-line) used to determine:
 - a. High resistance/loose connections and faulty components.
 - b. Motor and bearing problems.
- n **Surge and Megger Test** (performed with motor off-line)
 - a. Used to verify motor windings are not grounded, shorted or open.
- n **Polarization Index Test** (performed with motor off-line)
 - a. Build-up of dirt or moisture.
 - b. Gradual deterioration of the insulation.
- n **DC Hi Pot Test** (performed with motor off-line)
 - a. Used to verify break down of motor insulation.
- n **Laser Alignment Service** (performed with motor off-line)
 - a. Used to align two shafts that are coupled together.
 - b. Advantages-faster and more accurate than dial alignments.



All tests offered by C.W. Silver Industrial Services, Inc. are portable and can be accomplished on site. The tests provide operating condition assessment of the machinery, allowing maintenance personnel to perform repairs on scheduled down time instead of overtime.

This in turn eliminates unscheduled downtime and reduces the expense of overtime; assuring reliability of your equipment.

For more information, call C.W. Silver at 801-366-4100 or 800-433-4548