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PREVENTATIVE MAINTENANCE PROGRAM

How Preventive Maintenance Impacts Failure Rates

Reduced Unexpected Downtime: By scheduling maintenance, you gain more control over when failures occur, avoiding sudden, unplanned breakdowns and their associated costs.

Lower Repair Costs: Addressing issues during a scheduled PM is often less expensive than emergency repairs.

Extended Equipment Life: Regular maintenance helps ensure equipment operates for its intended lifespan, reducing the need for premature replacement.

Preventive Maintenance: A structured approach that builds a buffer into your operations by performing maintenance based on time or usage. This reduces the chances of equipment failure before it happens.

Run-to-Failure Maintenance: This is a reactive strategy where equipment is run until it breaks down, and then repairs are made. While it can be suitable for some non-critical, low-cost components, it introduces significant risks for critical assets, including:

- Higher costs for emergency repairs.
- Longer, unpredictable downtimes.
- A higher probability of cascading failures.

These services are essential to insure efficient operating conditions and extended equipment life. Midstate's Preventive Maintenance Program working in tandem with predictive maintenance is performed to detect early signs of deteriorating performance and to predict potential system failures. Our Preventive Maintenance Program is performed on an ongoing basis and is scheduled with little or no equipment downtime with its primary objective aimed at system durability, reliability, efficiency, and safety.

HVAC - INSPECTION

- Filter change outs monthly and quarterly
- Complete inspection of system for refrigerant & oil leaks
- Condenser coil – inspected and cleaned annually
- Evaporator coil – inspected and cleaned annually
- Fan belt changed – annually
- Check compressor & motor amperage/voltage
- Check operating pressures
- Clean condensate drain and pan
- Check all limit & safety controls

COOLING TOWER - INPECTION

- Check the entire tower for cracks, leaks, and corrosion on the casing
- Verify the water level is within the recommended range
- Check for clogging, damage, and proper spray pattern
- Inspect for blockages, deterioration, or missing parts
- Inspect for loose bolts, wear, and proper belt tension/alignment
- Regularly test water samples for Legionella bacteria
- Inspect fill media and drift eliminators
- Inspect the basin for sludge , debris, and clean strainer.
- Lubricate motor bearings and check for oil leaks in the gearbox and verify oil levels

CHILLER - INSPECTION

- Evaporator – inspected and cleaned annually
- Tub brushing – annually (if applicable)
- Check and record oil levels, temperatures, and pressure
- Check water flow and pressure drop across the chiller
- Inspect and clean electrical contacts, wiring, and terminals
- Verify the proper operation and settings of safety controls

BOILER - INPECTION

- Check the boiler for any signs of corrosion, debris, or other physical damage
- Clean and inspect the heat exchanger, tube sheets, and refractory material
- Look for any leaks from the boiler, its piping, or components
- Inspect the burner flame for changes, which can indicate an issue
- Test all operating controls, limit switches, and flame-safeguard controls
- Inspect all gaskets for leaks and check electrical terminals for secure connections