



Your Helping Hands in Keeping Your Plant Up and Running

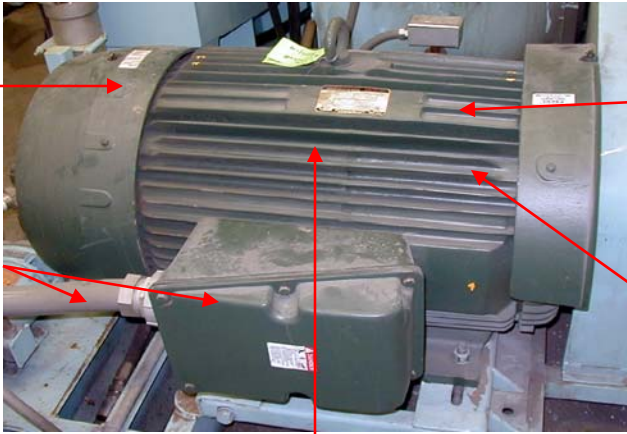
Electric Motor Circuit Analysis

Utilizing the latest electric motor testing technology available, we are able to evaluate the condition of electric motor fault zones to help reduce your plants unscheduled downtime. While the motor is in operation, potential motor problems are identified before they occur, minimizing production lost due to catastrophic motor failure.

Our Electric Motor Circuit Analysis will evaluate the risk of electric motor failure. Using the testing results provided, we can identify which motors:

- Have electrical unbalance and reduced life cycle
- Need maintenance at the next available opportunity
- Should be budgeted for repair or replacement
- Can be saved and repaired with simple fixes

Fault zones evaluated:



Air Gap
Uneven rotor and stator airgap due to worn bearings, housings and bowed shafts, resulting in magnetic imbalances.

Rotor
Identify cracked and broken rotor bars and high resistance connections on the end rings through motor current signature analysis and the rotor influence check.

Stator
Phase-to-phase resistance, inductance, impedance and current imbalances are used to determine turn or phase shorts as well as faulty internal connections.

Insulation
Resistance-to-ground values for motor windings decrease as moisture and contamination increases. Our equipment provides testing capabilities up to 5000VDC and offers continuous graphing polarization index (PI) and computer automated step voltage tests.

Power Circuit & Quality
All connections, components, and cables between the MCC and the motor must be resistively balanced. Potential problems occur when loose or corroded connections are present in a circuit. We compare each phase of resistance, current, and voltage to ensure a perfect balance.



Our PDMA Electric Motor Circuit Analysis equipment works on AC induction, synchronous, wound rotor, DC motors and their circuits, as well as servo motors. It is also an important tool for troubleshooting.



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