PdMA CORPORATION A Leader in Electric Motor Testing

Tip Of The Week

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Don't Forget Reliability

Given the sometimes frenzied movement in the effort to go green, maintenance management may overlook the fact that maintaining reliability can pay dividends towards efficiency while improving the bottom line. Over the next five weeks this Don't Forget Reliability six tip series will explore the impact of each of the six fault zones on motor efficiency.

Part Two – Power Circuit
The power circuit fault zone is defined as the system of conductors and connections running from the point of origin of testing to connections at the motor. Any non symmetric change in the resistive element of a three phase circuit will create an imbalance in voltage and current. This imbalance results in inefficient circulating currents that produce elevated winding temperature without performing any real work. A study conducted in the mid-1990's determined that more than 46% of the faults found in industrial power distribution systems that reduced motor efficiency stemmed from problems within the power circuit.

For more information on the effects of reliability on motor efficiency go to http://www.pdma.com/pdfs/Articles/WhitePapers/Motor_Efficiency_and_Fault_Zone_Analysis.pdf.

To watch a short discussion on the Power Circuit Fault Zone go to http://www.pdma.com/webinars/Power_Circuit_Fault_Zone/powercircuit.html.

You are invited to submit an Electric Motor Testing Tip of your own and receive a free PdMA mug or hat if we publish it! Contact Lou at 813-621-6463 ext. 126 or lou@pdma.com.