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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 three weeks this Don't Forget Reliability six tip series will explore the impact of each of the six fault zones on motor efficiency.

Part Three – Insulation

The Insulation Fault Zone offers the most indirect relationship to efficiency of the six fault zones. Although in a low ground environment some current will flow to ground it is often a very small amount leading up to the outright failure at which point motor efficiency is not our biggest concern. When discussing motor efficiency, the root cause of insulation degradation (surface contamination) should be a primary focus. Left unattended, contamination build up on the surface of the insulation system will act as an additional insulator or thermal blanket. This will eventually lead to elevated winding temperature and reduced efficiency.

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 Insulation Fault Zone go to http://www.pdma.com/webinars/Insulation_Fault_Zone/insulation.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.