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

Part Five – Rotor
The rotor fault zone refers to the rotor bars, laminations and end rings. A high resistance, or crack in the cage (rotor bar/end ring combination) will result in an elevated reflected impedance onto the stator winding. Load, being indifferent to the motor issues continues its demand on top of the now elevated demand of the higher impedance. This all results in an overworked motor to deliver the same load. Overworked can mean overheated and elevated temperatures are not conducive to motor 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 Rotor Fault Zone go to http://www.pdma.com/webinars/Rotor_Fault_Zone/Rotor.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.