



Electric Motor Testing Tip of the Week

revolutionizing *electrical* reliability

May 21, 2007

Using %Load Deviation to Trend Rotor Defects

Broken or cracked rotor bars cause a varying or modulating reflected impedance, which varies the current and torque of the motor. This appears as load fluctuation on the current time domain and as an increasing spectral peak in current demodulation. By trending the %load deviation found in the EMAX current demodulation test this change can be easily identified. In one case for a large two-pole motor trended through advanced stages of rotor defects, the %load deviation increased over 200%.

For more details on this case study go to: <http://www.pdma.com/PDF/CS0402.pdf>

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.

Copyright 2007 PdMA Corporation. All rights reserved. The PdMA Tip of the Week is produced by PdMA. PdMA shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon.