



A Leader in Electric Motor Testing

Tip Of The Week

September 8, 2014

%FLA...When Is It Too Low?

Having a stress fracture of your leg bone may not be obvious when sitting in the recliner with the remote. However, when you put a stress or load on the fracture, like jumping or running, pain and suffering may make you a lot more aware of the fracture.

The same can be true for a cracked rotor bar on a squirrel cage induction motor. At light loads, the impact of the fault may not be as obvious. However, loading the motor will increase the slip, current flow through the rotor bar will increase, and non symmetrical thermal heating surrounding the defect will make the fault more obvious through current signature analysis or rotor influence testing.

So when is %FLA too low? The answer is...there is no low limit to the %FLA for testing motors. Rotor bar anomalies have been identified even in lightly loaded scenarios and trends and comparisons can still be made at similar low loads. So, although a heavier load on a motor will significantly increase your chance of seeing rotor defects, you should not miss the opportunity to capture running data on a motor even at lower %FLA.

To read a case study go to: http://www.pdma.com/pdfs/cs/Rotor_Testing_and_Load.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.

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