



A Leader in Electric Motor Testing

# Tip Of The Week

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## Don't Forget Average Inductance

When attempting to identify broken rotor bars on a squirrel cage induction motor, a very reliable and confirming indicator of broken rotor bars is the trend of average inductance. Broken rotor bars cause a higher reflected impedance into the air gap and on to the stator windings, resulting in elevated inductance readings of the stator windings. Even if the fault is not severe enough to create a high inductive *imbalance* the problem can be seen and trended using the average inductance value. There are no industry standards on average inductance, so review of the history chart or trend plots will be necessary for analysis. Increases in average inductance of 50-100% or more is possible as you can see in the linked video at the PdMA YouTube Channel <https://www.youtube.com/watch?v=uF1W5emr6QM>

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. 166 or [lou@pdma.com](mailto:lou@pdma.com).

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