



A Leader in Electric Motor Testing

Tip Of The Week

April 11, 2016

Justification Series Tip #6

Wound Rotor "Induction" Motor

Continuing with the justification series of case studies providing excellent examples of loss prevention, we have another great case study sent to us by a loyal customer. Although there are no rotor bars on the rotor of a wound rotor motor, we must remember that this type of motor still operates on the induction principle. Instead of squirrel cage rotor bars there are three phases of windings connected through slip rings and brushes to some type of variable resistance such as a resistor bank. Voltage is induced onto the rotor windings due to the slip (difference in rpm) between the stator magnetic field and the rotor. Any disruption in the connectivity of the rotor circuit will change the rotor magnetic field and reflect this change onto the stator windings as well. This reflected change can be identified by analyzing the current analysis time domain and spectral data collected from the stator windings using your EMAX technology.

To see a wound rotor case study and hear about the cost avoidance justification visit the PdMA YouTube channel at <https://www.youtube.com/watch?v=YKSQBVL0bos>.

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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