



A Leader in Electric Motor Testing

Tip Of The Week

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Trend Is Your Friend

Troubleshooting a motor without historical data to reference for a change in baseline, or a gradual trend up or down can be a difficult task. The IEEE 43 standard (Recommended Practice for Testing Insulation Resistance of Rotating Machinery) states that 100 Meg is the minimum acceptable resistance-to-ground value for a form wound AC motor. So, a 110 Meg insulation-to-ground reading on an installed form wound motor would normally create a cause for concern. However, if you had five years of data on the very same motor that showed only a 1 Meg drop over the five years, your ability to quantify the severity of the low resistance-to-ground would be far better. With trend as your friend, no immediate action would be necessary as the condition is above the minimum and stable. With no history you might feel that this was an imminent failure risk and decide to secure production, resulting in an unscheduled outage, to prevent a potential catastrophic failure that in all likelihood would not have happened. So get your baseline on all assets worthy of your interest and schedule some future tests to establish a trend.

To see a case study on the proper use of trending insulation resistance-to-ground and using that trend to take appropriate action go to the PdMA YouTube Channel at <https://www.youtube.com/watch?v=9SG3INm8u8w>

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.

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