A Leader in Electric Motor Testing

Tip Of The Week

June 10, 2019

Electric Motor Reliability Trifecta - Trending (Part 2)

(Continuing the Trifecta series, picking the top three finishers in a horse race can be worth a lot of money. Applying the Trifecta theme to motor reliability, the top three applications of test technology to ensure you win big in reliability are: Quality Control, Trending, and Troubleshooting.)

Keeping the focus on Trending, the last tip discussed qualitative trending and focused on the change in appearance. This week we switch from qualitative to quantitative trending. For analysts that like numbers, quantitative trending is the way to go. Seeing actual numbers for measurements like resistance, inductance, current, voltage, impedance and how they have changed as compared to the last test or the last baseline is a powerful tool. If the analyst taps into resources like IEEE (The Institute of Electrical and Electronics Engineers) or EASA (Electrical Apparatus Services Association) or NEMA (National Electrical Manufacturers Association) then he or she will access many lifetimes of research into electrical test standards that further provide quantitative limits by which to make decisions from. Don't forget to lean on your technology vendor to optimize the selection of KPI's (key performance indicators) and alarm setpoints to select for the quantitative trending of measured data. Also, remember to perform an annual review of these setpoints to keep up with changes in the industry and ensure your setpoints are not too liberal to miss a change, or too conservative causing nuisance alarms.

Visit our PdMA YouTube Channel at https://www.youtube.com/watch?v=O2HnlAsx56w to listen to Todd and Noah discuss details on Trending for electric motor reliability.

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.