PdMA® CORPORATION A Leader in Electric Motor Testing

Tip Of The Week

August 21, 2017

Failure to Launch

Starting a motor across the line can generate 7-10 times or more the normal full load amps and create extreme torque stress on the shaft line components. In addition to these normal stresses on the electrical and mechanical elements of the motor, protection systems like overload and transient sensors are also stressed, often resulting in nuisance tripping. But sometimes the tripping is not a nuisance and the protection systems are doing their jobs protecting the motor. What do you have in place to identify a nuisance trip from a legitimate one? Without some kind of validation, operations can be lulled into thinking that every trip is a nuisance trip resulting in excessive restarts and an inevitable reduction in life expectancy due to repeated, and unnecessary starts of the motor. A simple In-Rush/Start-Up test of current and voltage following a trip can provide a wealth of information into both the electrical and mechanical health of the system in question. This can be the primary data necessary to differentiate a legitimate vs. nuisance trip and allow reliability analysts and operators to make a quick, informed decision on the next steps to take in expediting a return to productivity.

To see a case study on the use of the In-Rush/Start-Up test to validate a motor trip, visit the PdMA YouTube Channel at: https://www.youtube.com/watch?v=fMDbhdLDu4o.

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.