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Tip Of The Week

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Changes in Inductance Waveforms

Performing a RIC test is a very good way to confirm rotor anomalies. When performing the RIC test, one should keep in mind the underlying principals of the test. One of these underlying principals is what causes the amplitude of inductance waveforms to change.

An increase in amplitude in the inductance waveforms is caused by two primary factors. One factor is the reflected impedance from the cage back into the stator windings. When a bar breaks, the “short circuit” effects of the cage are reduced, i.e., as the cage inductance increases, the reflected impedance into the stator windings increases. Another factor that increases the amplitude of the inductance waveforms is the increase in residual flux associated with rotor anomalies.

From *Influence of Rotor Residual Flux on the Measurement of Inductance and its Possible Use as an Impending Fault Indicator*
To read the entire article go to:
http://www.pdma.com/pdfs/Articles/Influence_of_Residual_Flux_on_the_Measurement_of_Inductance.pdf

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