

## **Tip Of The Week**

November 18, 2013

## **Know Your Rotor**



You are at peak production and your motor reliability analyst just told you that data recorded on a critical motor indicates rotor bar defects. What would be the appropriate immediate action? A very important variable in the decision on what to do next depends on the rotor design. If the rotor design is a closed bar design where the rotor bars are not exposed through the rotor iron, the need for a quick response is lessened and additional trending may be the call. With a closed bar design the fear of slot damage allowing a broken bar to slide through the damaged slot and into the stator windings is significantly reduced. However, if this rotor is an open bar design as shown in the picture, the fear of a rotor bar sliding out of a damaged rotor slot causing rotor and stator winding failure is real, and shutting down must be weighed against loss of peak production.

So... do you know your rotor?

For more information about open and closed bar rotor design and rotor analysis visit our website at: http://www.pdma.com/webinars/Rotor\_Fault\_Zone/Rotor.html

Did you know that PdMA<sup>®</sup> has Case Study videos on their website? To view the latest video titled *Rogue Robots* go to http://www.pdma.com and click on the Robot Button.

You are invited to submit an Electric Motor Testing Tip of your own and receive a free PdMA<sup>®</sup> mug or hat if we publish it! Contact Lou at 813-621-6463 ext. 126 or lou@pdma.com.

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