



## Electric Motor Testing Tip of the Week

revolutionizing *electrical* reliability

**April 21, 2008**

### Rotor Tests With Reduced Voltage Soft Starts (RVSS)

The rotor fault zone is analyzed and trended with the Rotor Evaluation test (MCEGold) and the Hi/Lo Resolution current captures (WinVis). With both programs we look for issues with rotor bars by evaluating the current peaks at Pole-Pass Frequency. Pole-Pass Frequency is a variable dependant on loading of the motor, but it is still relative to the supplied fundamental line frequency. When operating your motor with a Reduced Voltage Soft Start, the line frequency is un-manipulated through the semi-conductors outside of the starting cycle as long as the RVSS is not limiting the current. The current spectrums are evaluated as if the motor was running across the line.

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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. 126 or [lou@pdma.com](mailto:lou@pdma.com).

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