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## Motor Troubleshooting Webinar Description

Operators need to know how to identify and troubleshoot common motor problems. Variable frequency drives (VFD's) are commonly used to control motors, and they are frequently installed and run incorrectly. This course will cover motor & VFD problems and how to improve efficiencies.

To learn how to perform motor evaluations and tests, when and how to upgrade motors, motor failure analysis, and how to improve efficiencies, especially with the use of VFD's. Motor efficiency is tested by measuring amp draw and voltage under different loads. The test results are then be compared to the calculated system efficiency to determine if there is a problem with the actual efficiency. Operators will learn how to use a megohmmeter to determine if the insulation is failing in the motor which is a common problem on old motors. Predictive maintenance techniques such as thermal and vibration analysis will be covered in detail. These techniques are used to identify bearing wear, misalignment of the pump & motor shafts, and worn out windings. Variable Frequency drives are used to control motors. We will cover how the units should be wired and how to protect them from their environment including the use of line protection and unit cooling. Motor protection, motor starter problems, phase problems, and VFD troubleshooting will be covered in detail.