

Maximize Your Investment!



EDUCATIONAL SERVICES

PeakVue™ Mystery and Autocorrelation

This 3-day course provides insight into advanced functionality of Emerson's unique PeakVue™ technology and Autocorrelation. Machine vibrations generate both macro and microscopic vibrations, and microscopic vibrations generate stress waves that have frequency ranges determined by the mass of the impacting object. The properties of these stress waves will be explained.

The Autocorrelation section of the course will teach the power of the autocorrelation coefficient function for the analysis of vibration induced time wave form data. The autocorrelation function data generally are computed from the same time wave form data used to compute the spectrum. The strengths of the autocorrelation data are complimentary to the strengths of the spectral data.

This course makes use of both case studies from real-life examples of common faults and live demonstrations illustrating specific mounting procedures to reliably detect certain faults. The difference between PeakVue™ technology techniques and demodulation will also be demonstrated.

Prerequisites: Students should be familiar with vibration data collection and analysis techniques and the use of AMS Machinery Manager Software.

Topics include:

- Proper PeakVue™ technology set-ups for all speeds (as low as 1 rpm)
- Sensor selection and sensor mounting
- Setting alarm levels
- Choosing trend parameters
- Analyzing PeakVue™ technology spectra and waveforms
- Uses of the circular waveform plot
- Introduce the autocorrelation coefficient
- Demonstrate the computation of the autocorrelation coefficient data from the time wave form data
- Highlight the strengths of the autocorrelation coefficient function data relative to spectra data
- Demonstrate the use of the autocorrelation coefficient data as a diagnostic tool to support the spectra data for vibration analysis through several case studies
- Identify unique patterns of the autocorrelation function data for certain classes of bearing faults, gearing faults, etc.

LOCATIONS

- September 15 to 17, 2015
- **Eastern Iowa Community College**
Blong Technology Center
8500 Hillandale Rd
Davenport, IA 52806
- 8:30 AM - 4:30 PM daily
- \$1,500 per person.
- Lunch, snacks, and drinks will be provided
- Registration:
For questions or to register contact Janelle Shatava at 641.844.5182 or at Janelle.Shatava@RSStover.com



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