

# Education in Machinery Health™ Management



## REGIONAL BASIC VIBRATION ANALYSIS COURSE



### BASIC VIBRATION ANALYSIS (COURSE #2031) – 2.8 CEUS

Compliant with Category I Vibration Analyst per ISO standard 18436-2: Vibration condition monitoring and diagnostics.

This course enables students to operate single channel machinery analyzers, dump and load routes, recognize the difference between good and bad data, and compare vibration measurements against pre-established alert settings. While this course is not product specific, students will use Emerson's CSI technologies for demonstration purposes. This course will use Emerson-supported vibration analyzers and software to analyze basic vibration defects. Prerequisites include the course *Fundamentals of Vibration Analysis* or a cumulative six months of field experience.

#### TOPICS INCLUDE

- Principles of Vibration
- Data acquisition and signal processing
- Condition monitoring and corrective action
- Equipment knowledge
- Acceptance testing
- Basic analyzer functions
- Recognition of machine defects including:
  - Unbalance
  - Shaft misalignment

- Looseness
- Rolling element bearing defects
- Gear problems
- Resonance
- Introduction to electrical defects

Optional Category I exam available at the end of this course. Passing grade for this 2-hour written exam is 75% or greater. To be eligible for the exam, student must have a minimum of 32 hours of training and 6 months experience.

#### DATES AND LOCATIONS

- May 21st to 24th, 2012

##### Novaspect, Inc.

1124 Tower Road  
Schaumburg IL 60173

8:30 AM to 4:30 PM daily

- \$2,150, which includes exam fee, per person for course. Continental breakfast and lunch will be provided daily.
- Registration:

To register or for more information, visit [www.novaspect.com/education](http://www.novaspect.com/education) or contact Novaspect Education Services at 847-709-8940.