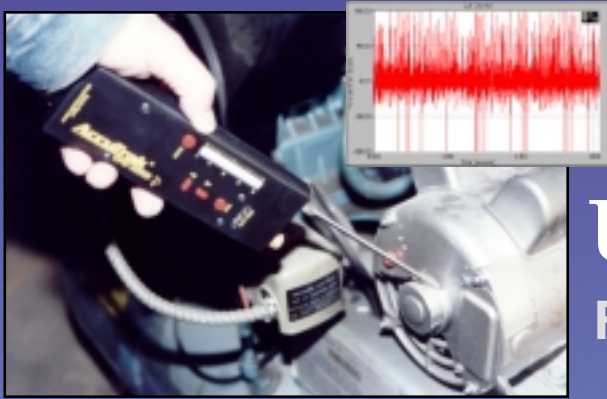


Superior Training Services Presents...



Ultrasonic Inspection For Plant Maintenance Professionals

Ultrasonic inspection has proven to be one of the most versatile and effective techniques available for the preventive maintenance of moving equipment as well as energy conservation/leak detection applications. When used properly, savings in the 10's or even 100's of thousands of dollars in energy costs and avoided downtime can be realized utilizing ultrasonic inspection.

- *Do you own ultrasonic inspection instruments that are seldom, if ever used?*
- *Do you feel the equipment is being used differently by different people?*
- *Does the validity of the results depend on who does the test?*
- *What could you be doing to get more out of your ultrasonic inspection program?*

In our daily interaction with those responsible for maximizing plant efficiency, experience shows that many who are using ultrasonics don't really understand the physical principles behind the operation of these instruments. Many do not understand the *true* frequency response of their instruments, nor do they have a basic understanding of the frequency translation process which is involved. This can result in a false sense of security, and unrealistic expectations.

What you can expect from this course...

This training course provides an excellent overview of ultrasonic inspection principles, techniques and practical application. It offers valuable data for both beginners and experts alike. Attendees will understand the similarities and differences between sound and vibration, including how ultrasound is created, how it propagates through gasses and solids, and how it is detected, translated and analyzed.

The basic components of an ultrasonic detector and their functional significance will be explained for they directly impact frequency detection, translation and the signal analysis capabilities of *any* ultrasonic instrument. Attendees will gain a working knowledge of ultrasonic technology, understanding how to apply it at their facility.

This is not a "how to use our instrument" seminar. The information presented applies to users of all manufacturers instruments. It is complete and not commercially biased. The course moves quickly as information is presented using various media, including hands-on demonstration.
(You are welcome to bring your own instrument).

Although we consider this an introductory course, we feel you will gain more useful information in one day of our training than in 2-3 days from other organizations.



All attendees will receive a certificate of training, and a review course on CD.

Course Outline

- **Defining Sound/Ultrasound**
 - What is Sound / Ultrasound?
 - Phenomena which cause sound to occur.
 - Characteristics of Sound
 - Measurement of Sound
- **Detection and Translation of Ultrasonic Frequencies**
 - Detection Methods (Air, Contact)
 - Translation Methods (Heterodyne, DND)
- **Airborne Leak Detection**
 - Principles
 - Uses (Air Surveys, Vacuum, Refrigerant)
 - Minimizing the effects of background noise
- **Internal Leak Detection**
 - Valve leak detection
 - Steam trap testing
- **Electrical Applications**
- **Underground Detection Techniques**
- **Predictive Maintenance of Moving Machinery**
 - Overview of basic principles
 - Basic trending
 - Ultrasound -vs- vibration analysis
 - Repeatability and instrument calibration

Questions & Review

All Attendees receive a certificate of training and review course on CD.

The Company

For 50 years Superior Signal Company, Inc. has provided reliable products at realistic prices. Our marketing philosophy has always been to deliver honest straight forward information with limited marketing hype.

Our engineers are experts, not only in the electronic processes involved in these instruments, but in the physics of sound.

What we do is truly different. In our last 10 years of designing and manufacturing ultrasonic inspection systems we have been credited with *6 of the most recent patents in the field of ultrasonic inspection*. No other company has contributed nearly as much to the advancement of ultrasonic inspection technology.

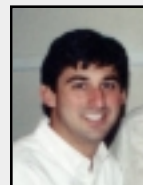
The Instructors



John Visotsky



Nick Komninos



Paul Tashian

Our instructors have over fifty years combined experience in the design, sales, and training of ultrasonic inspection equipment. They have presented many seminars on the use of airborne/solidborne ultrasound and predictive maintenance. All have the ability to provide useful, easy to understand information relevant to all levels of maintenance. We have trained many diverse groups in the use of ultrasonic inspection principals, instruments, applications and techniques.

**See Registration Form for
Locations/Dates and Current Costs.**

**On-Site programs available, and will include
“In-Plant” review and instruction.**

Superior Signal Company, Inc.

P.O. Box 96, Spotswood, NJ 08884
1-800-945-TEST (8378) or (732) 251-0800
Fax: (732) 251-9442, www.SuperiorSignal.com