

# iLEARN SOFTWARE

## INTERACTIVE VIBRATION TRAINING PROGRAM

**iLEARN VIBRATION** is a self-paced graphic rich program designed to provide basic vibration analysis and condition monitoring training. Each slide is fully narrated, animated and the entire program is upgradeable. Save thousands in Seminar fees and start learning vibration analysis.



The screenshot shows a slide titled "Condition Monitoring" with the subtitle "Practical methods". The text describes the basic procedure of placing a sensor on a bearing (either on the bearing with an "accelerometer" or inside the bearing with a "non-contact eddy current probe") and measuring the vibration with a portable wireless data collector. Below the text are two small images: one showing a person working on a large industrial bearing, and another showing a close-up of a bearing with a probe attached.

Start with the basics and work your way through to more advanced topics via fully narrated slides and animations.

The screenshot shows a slide titled "Condition Monitoring" with the subtitle "Infrared Thermography". The text explains that thermography is another popular technology applied to rotating and other equipment in the plant. It involves the study of temperature; as increased wear, steam leaks, and electrical arcing (to name but a few conditions) will result in a change in temperature. Below the text are three small images: one showing a person working on a bearing, another showing a red and yellow infrared thermal image of a bearing, and a third showing a similar thermal image with a specific area highlighted.

Learn about other condition-based maintenance techniques like Thermography and Oil Analysis.

iLEARN VIBRATION interactive CD. Other Modules available include: iLearnCase Histories, iLearnHandsOn, iLearnSignals, iLearnMachineFaults and iLearnInstructor. Please call for details.

## Why should you purchase iLearnVibration?

This document is intended for the person who must justify or authorize the purchase of the iLearnVibration product.

### Executive summary

A training and assistance system can make the difference between a successful vibration monitoring program, and a program that does not give the desired return. Classroom training is essential, but your staff need refresher training, and analysis assistance. Use of our products will ensure that your vibration system is set up correctly, run effectively, with the best results achieved: timely and accurate warnings of pending machine faults

iLearnVibration can be justified because:

1. iLearnVibration [Interpreter] actually aids in the analysis process. With Interpreter, a person is more likely to accurately (and quickly) diagnose a machine fault.
2. The iLearnVibration training gives a person the background knowledge and the techniques required to collect quality data and make accurate diagnoses.
3. The iLearnVibration training and the Reference Center are available 24 hours per day – ready to provide refresher training and answer questions that are bound to come up. Many of our current customers report that they use iLearnVibration *many times per week* for this very reason.
4. The iLearnVibration [Professional] modules allow a person to gain measurement and analysis experience with our “live” case histories. Most people learn from experience – but learning from mistakes made in your plant can be very costly and embarrassing.

Key feature vs. iLearnVibration product bundle	Interpreter	Standard	Solution Center	Professional	Solution Center Pro
<b>Analysis assistance</b>	•		•		•
<b>Interactive training and reference</b>		•	•	•	•
<b>Case histories and virtual test rig</b>				•	•

Note: The standard license allows the system to be used on one computer at a time. The purchase of a network license enables the system to be shared by multiple users at multiple sites.

The remainder of this document explores these benefits in more detail.

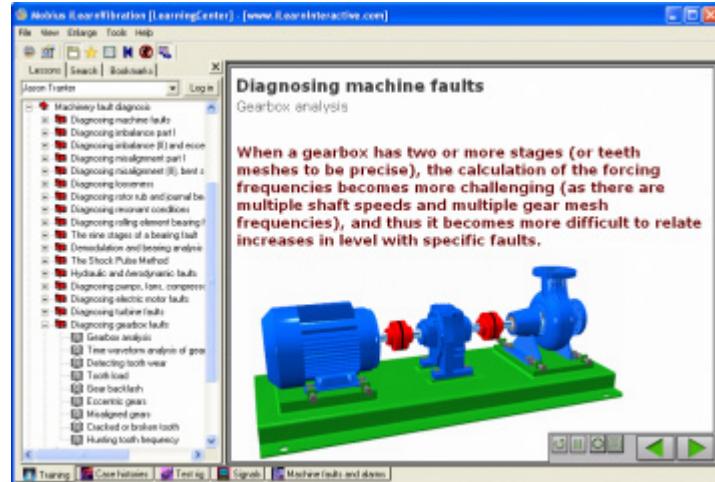
## Three Keys to Success

There are three key elements to the system, and there are two basic ways to license the product.

### [1] Training and reference

Vibration analysis is very complex – there is a great deal to learn (and remember), and many of the concepts are difficult to understand. Given that an incorrect diagnosis can be very expensive, it is essential that everyone involved with the program is well trained – from the person who collects the data through to the person who runs the program.

Our product does not replace the classroom training, however 90% of people leave training classes barely remembering what they were taught on the first day. And after a month or two, most people remember less than half of what they were taught. Our product can be used by new staff for initial training, and existing staff for refresher training.



The training is fully narrated, and is filled with 3D animations and interactive "software simulations". This makes it very interesting (so it gets used), and ensures that the difficult concepts are easily understood.

While we do not provide "official" certification, our product has helped many people prepare for, and pass, the certification exams, and they go on to be successful analysts.

You may ask why people need training. If you have ever looked at a time waveform or spectrum, you would know. If you have ever been put on the spot and required to distinguish between shorted laminations and a cracked rotor bar; or to decide whether a bearing was bad enough to warrant shutting down a production line; then you would certainly know. Vibration monitoring and analysis is difficult – vibration analysts need (and deserve) every bit of help they can get.

### [2] Analysis assistance with Interpreter

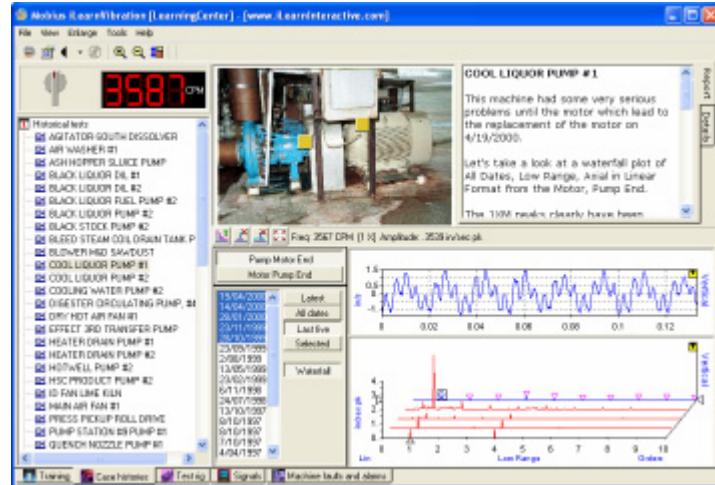
To the untrained eye, spectra can look like a forest of peaks. But hidden in the forest may be signs that a bearing will soon fail. Finding the pattern is difficult enough, but knowing what the different patterns indicate is even harder.

Interpreter is an ingenious software program that reads the spectrum right off the screen (all major vibration monitoring software programs are supported), it finds the patterns hidden in the data, and explains what they mean. And if you own the training module described above, it provides a link to the lesson that explains the indicated fault condition in greater detail.

Experienced analysts have reported that Interpreter has found faults that they completely overlooked, and provided suggestions for patterns that they had not even considered. It will pay for itself (many times over) the first time that it helps to diagnose a fault.

### [3] Case histories build confidence

Most people learn from experience. To gain experience and build confidence, analysts need to be exposed to vibration data that demonstrates actual faults from machines. The [Professional] bundle provides fifty (50) sets of data from machines. They show the history of the vibration data as a fault developed. The photo shows the machine, and the report describes the data and the fault history. Twenty-five case histories have "live" data from the machine – think of it as having 30-second tape recordings of the vibration from all over the machine. The report describes the data and what was wrong with the machine.



In addition to these "virtual machines", we also have a "virtual test rig", with "live" data from a world-class test rig (also known as a fault demonstrator). Classic examples such as imbalance, misalignment and bearing faults are available at the click of a mouse.

And there's more

This document has focused on the key features and benefits of our system. But in the interest of time, we have left out a great many capabilities: machine modelers, signal simulators, band alarm creators, frequency calculators, instructor tools, in-house certification, a bearing database, and much more.

### Credentials

The author of iLearnVibration has been involved with vibration analysis since the early '80s. For much of that time he was involved with the development of data collectors and vibration analysis products for one of the major U.S. manufacturers. He has seen, first hand, how difficult it is to run a successful program. Occasional training simply does not cut it!

iLearnVibration has been on the market since September of 2000, and in February 2004 we released Version 3.0 of the system. We have customers in over 60 countries (we have even won a prestigious export award). Over 2000 people have been trained by our product. Many of the major training organizations and universities use our product, but more importantly, it is used by major corporations such as Kodak, Shell, Boeing, General Motors, and many others.

We have testimonials and endorsements from a large number of users. In many cases, after selling to one plant, we have later sold to sister-plants after recommendations.

***We have a high-quality product, and your staff will benefit in many ways.***



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## Licensing

To protect the significant investment we have made in the development of this product, we utilize a software key (or 'dongle'). When you buy a system you receive a dongle. While it is connected to the computer, the system will work.



You can optionally purchase a network license. This enables people within an organization to share the benefits of the system; whether they are all located at one site or spread across multiple networked sites.

## What's stopping you?

Thanks to the richness of our products, and the fact that our training is narrated and complete with software simulations, and because we have fifty "virtual machines", we do not consider alternative products to be our main competition.

Nor do we consider organizations that provide training classes to be our competitors (many of them use our product). Due to the personal interaction and contact with other analysts, we believe classroom training is an essential component in any vibration analysts' development. The problem is that most people retain less than half of what they were taught.

Our main competition is your workload! Busy managers (and vibration analysts) have a lot to do, and you have restrictions on your budget (we don't need to tell you!). We appreciate that you have read this far – but are you now able to take the next important step and raise the purchase order? Training is often viewed as a luxury – but it is not, and our product does far more than just provide training.

A vibration monitoring program can achieve great results; but the people who collect and analyze the vibration readings need your help right now to make it a success.

Thank you for taking the time to consider the purchase of our product. If you have any questions, please do not hesitate to contact your reseller, or Mobius directly: [info@ilearninteractive.com](mailto:info@ilearninteractive.com).