



# CASTLE TRAINING ACADEMY

OVER 20 YEARS OF TRAINING HERITAGE



## COURSE GUIDE 2011

HUMAN VIBRATION  
DIRECTING SAFELY  
MANAGING SAFELY  
WORKING SAFELY  
NOISE AT WORK  
ENVIRONMENTAL  
NOISE ASSESSMENT  
CONFINED SPACES  
MANAGING ASBESTOS  
PERSONAL AIR  
SAMPLING & COSHH  
INDUSTRIAL AUDIOMETRY  
CONDITION MONITORING  
DIAGNOSTIC VIBRATION  
SIGNAL PROCESSING

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CASTLE  
TRAINING  
ACADEMY

# EXPERT TRAINING

## FOR HEALTH & SAFETY PROFESSIONALS

### COURSE LISTINGS

1. HUMAN VIBRATION  
HAND-ARM & WHOLE BODY
2. IOSH MANAGING SAFETY
3. IOSH WORKING & SAFETY
4. NOISE AT WORK
5. ENVIRONMENTAL NOISE  
ASSESSMENT
6. CONFINED SPACES
7. ELECTRO-MAGNETIC  
& RADIATION
8. PERSONAL AIR SAMPLING  
& COSHH
9. INDUSTRIAL AUDIOMETRY

### BESPOKE & IN-HOUSE COURSES



### EXPERT TRAINING PROVIDERS

Our lecturers bring a wealth of 'real world' experience to each training session, each course draws on this **practical approach** to place the focus directly on **making delegates competent in what they actually need to do!**

### CATERING TO YOUR NEEDS

We also offer a **Bespoke Course Service**, you tell us your details (industry, requirements and problems etc) and we do the rest **providing you with the training to solve your legislation issues**. Alternatively **we visit you** and survey your needs to come up with a training solution that fits. Training can even be administered **in-house at your workplace** allowing more tailored control to teach the techniques needed by your employees to carry out risk assessment competently.

### BOOK NOW!

To book your place on one of our courses or for more information on our bespoke and in-house services simply fill in and **return the included form**, call us on the number below or visit our website.

**01723 584250**

**[www.castletrainingacademy.com](http://www.castletrainingacademy.com)**

### YOUR LEGAL REQUIREMENTS

The HSE states in guidance that assessments must be carried out by people with the necessary knowledge and skills to assess and manage the risks.

"WHETHER CARRYING OUT THE WORK YOURSELF, APPOINTING OTHER PEOPLE, OR A COMBINATION OF THE TWO, YOU NEED TO MAKE SURE THAT THE ASSESSMENT AND MANAGEMENT OF THE NOISE RISKS IS CARRIED OUT IN A COMPETENT MANNER BASED ON THE COMPETENT ADVICE. THIS MEANS MAKING SURE THAT ALL PEOPLE INVOLVED IN THE PROCESS HAVE THE NECESSARY TRAINING AND EXPERIENCE TO CARRY OUT THEIR PART OF THE WORK."

### TESTIMONIALS

**Alastair Smith - Michelin Tyre PLC**

Course very well constructed and delivered a lot of information was put across at a good pace and with great skill.

**Peter Jones - North Wales Fire & Rescue**

Excellent course thoroughly enjoyable, lecturer understands the subject to a very high degree.

**Fraser Peden - North Lanarkshire Council**

Overall an effective and worthwhile course presented by a trainer who is clearly knowledgeable on the subject of HAV's and WBV.

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# HUMAN VIBRATION

## HAND-ARM & WHOLE BODY

### 3 DAY COMPETENT PERSON COURSE

#### COURSE OVERVIEW

The course is divided into 2 modules, which are structured in the following way:

##### MODULE 1 Three Day Seminar

The syllabus for module 1 will include major topics incorporating vibration theory, Hand-Arm and Whole Body Vibration Measurement protocol and parameters, vibration reduction techniques, legislation and standards, instrumentation and measurement. There is also a heavy practical element of the course to familiarise you with the techniques of measurement and the fundamental operation of instruments.

##### MODULE 2 Hand-Arm and Whole Body Vibration Risk Assessment Report

This can either be produced using results from measurements taken during module 1 or can be a project of your choice, which involves the production of a 'Hand-Arm Vibration' risk assessment report. This report is the basis of certification for the course and is marked by your tutor. On successful completion, a certificate of competence will be issued.

#### WHO SHOULD ATTEND

If vibration from hand held power tools or whole-body exposure to plant and machinery is an issue or a potential problem in your organisation, then this is the right course. **Ideal for health and safety professionals, works managers, engineers or simply the responsible person**, this course leads to a qualification of 'competence' for carrying out Hand-Arm and Whole Body Vibration Risk Assessments. There is no pre-qualification making the course equally suitable for novices or the more experienced.

#### COURSE AIMS

This course is designed to give you a detailed insight into the requirements of Hand-Arm and Whole Body Vibration Risk Assessment.

**The course covers all the requirements of the Control of Vibration at work Regulations 2005** to ensure that you can be classed as 'competent' to carry out such work. The course is a mix of theory and practical exercises to give you all the necessary information and experience that will help you to reduce vibration exposure in the workplace.



#### OBJECTIVES

- To build an understanding of the principles of vibration
- To understand the effect of vibration on the human body
- To give you a detailed insight into the Control of Vibration at Work Regulations 2005
- To look closely at the HSE guidance
- To look in detail at instrumentation issues
- To give you an insight into practical vibration monitoring
- To provide you with hands-on experience
- To create an understanding of vibration control measures

#### WHAT WILL YOU ACHIEVE?

Your Academy Competent Person's Certificate is backed by over 15 years of training heritage and gives you just the evidence you need to provide suitability for the task.

You will also be entitled to claim CPD points for your professional memberships.





# MANAGING SAFELY

4 DAY ACCREDITED IOSH COURSE

## COURSE OVERVIEW

The course covers the following topics:

### SAFETY MANAGEMENT

Basic management principles and practices that apply to health and safety issues. Setting achievable health and safety objectives and planning to achieve those objectives.

### REACTIVE MONITORING

Awareness of the legal requirements for reporting & effectively investigating accidents.

### RISK ASSESSMENT

Identifying hazards and potential risks and applying appropriate control measures.

### ACTIVE MONITORING

Applying effective means of monitoring data.

### REVIEW & AUDIT

## HEALTH & SAFETY LEGISLATION

Codes of practice and relevant legislation.

## WORKPLACE HAZARDS

Such as Work Equipment, Noise, Manual and Mechanical Handling, Fire and Electricity, Housekeeping, Permits-to-Work, Chemicals and Substances, Display Screen Equipment, Construction, Confined Spaces and Food Safety.

## WHAT WILL YOU ACHIEVE?

Delegates will be awarded the IOSH Managing Safely certificate on successful completion of the course. Certificates are issued by IOSH approximately 10-12 weeks after the course ending.



## WHO SHOULD ATTEND

Managers and supervisors at all levels who are responsible for **health and safety** and **assessing and managing risk** within the workplace.

## COURSE AIMS

The course is run in accordance with the **Institute of Occupational Safety & Health (IOSH)**, and will give you the knowledge and skills to be classed as 'competent' to assess and control risk and manage the multiple **health & safety** issues within the workplace. The course covers a full range of common workplace hazards.



## OBJECTIVES

- To understand and apply the basic principles of managing health and safety
- To assess risk within the workplace and apply effective control measures
  - To ensure adequate training and safety information is available
  - To set health and safety objectives and to plan effectively
- To be able to investigate the cause of accidents and take appropriate action
- To be aware of employers legal responsibilities to employees and others

## ASSESSMENT

The assessment of this course is based upon a multi-choice examination paper and a project based on the delegates own work-place. Successful completion of the programme will lead to an **IOSH Managing Safely Certificate**.

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# WORKING SAFELY

1 DAY ACCREDITED IOSH COURSE

## WHO SHOULD ATTEND

Employees from **any industry** who do not have a supervisory or managerial role.



## COURSE AIMS

The course is run in accordance with the **Institute of Occupational Safety & Health (IOSH)**, and will give you a grounding in the essential aspects of health and safety in the workplace. The course includes an **assessment of hazards**, the importance of safety and how to **improve your safety record**.

## OBJECTIVES

- To understand the basic principles of health and safety
- To be aware of risks and your responsibilities within the workplace
- To be able to identify common hazards
- To improve your company's safety performance
- To help protect the environment

## ASSESSMENT

The assessment of this course is based upon a multi-choice examination paper and a work-place safety assessment. Successful completion of the programme will lead to an **IOSH Certificate**.

## COURSE OVERVIEW

The course covers the following topics:

- Identifying Hazards & Risk
- 
- Accidents And Their Causes
- 
- Legal Rights And Duties Of Employers And Employees
- 
- Preparing Risk Assessments
- 
- Defining Safe Working Conditions
- 
- Safety Of Equipment/Machines
- 
- Electrical And Fire Safety
- 
- Accident Reports

## WHAT WILL YOU ACHIEVE?

Delegates will be awarded the IOSH Working Safely certificate on successful completion of the course. Certificates are issued by IOSH approximately 10-12 weeks after the course ending.



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# NOISE AT WORK

3 DAY COMPETENT PERSON COURSE

## COURSE OVERVIEW

The course is divided into 3 modules, which are structured in the following way:

### MODULE 1

#### Distance Learning Package

Designed to give you an insight into the course and to familiarise you with some of the terms and concepts you will encounter.

This work gives a good foundation and should be completed before attending module 2.

### MODULE 2

#### Three Day Seminar

The syllabus for module 2 will include major topics incorporating acoustic theory, noise at work measurement parameters, noise reduction techniques, legislation and standards, instrumentation and measurement. There is also a heavy practical element of the course to familiarise you with the techniques of measurement and the fundamental operation of instruments.

### MODULE 3

#### Noise at Work Risk Assessment Project

This can either be produced using results from measurements taken during module 2 or can be a project of your choice, which involves the production of a noise at work risk assessment report. This report is the basis of certification for the course and is marked by your tutor. On successful completion, a certificate of competence will be issued.

## WHO SHOULD ATTEND

**Any organisation where noise is an issue** should have a competent person for noise at work risk assessments. This person may be a professional safety officer, a works manager or simply someone who has been given the responsibility for noise assessments. **The course forms an ideal follow up to a NEBOSH certificate or diploma** but is equally suited to newcomers.

## COURSE AIMS

The course is designed to meet the requirements of the **Control of Noise at Work Regulations 2005**, giving you the knowledge and skills to be classed as 'competent' to carry out a noise at work risk assessment.

The subjects covered vary from the principles of acoustics to the identification and management of noise problems. **Practical elements** are included to **help you with the task of reducing noise exposure in the workplace** and to assist in getting to grips with measuring instrumentation.



## OBJECTIVES

- To ensure that you have an understanding of the principles of acoustics
  - To develop an understanding of the effects of noise on people
  - To give you an insight into instrumentation
- To develop in-depth knowledge of the Control of Noise at Work Regulations 2005
  - To provide you with an insight into the principles of noise control
- To ensure you can prepare a report to satisfy an external inspector/auditor

## WHAT WILL YOU ACHIEVE?

Your Academy Competent Person's Certificate is backed by over 15 years of training heritage and gives you just the evidence you need to provide suitability for the task.

You will also be entitled to claim CPD points for your professional memberships.



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# ENVIRONMENTAL NOISE ASSESSMENT

3 DAY COMPETENT PERSON COURSE

## COURSE OVERVIEW

The course is divided into 3 modules, which are structured in the following way:

### MODULE 1

#### Distance Learning Package

Designed to give you an insight into the course and to familiarise you with some of the terms and concepts you will encounter.

This work gives a good foundation and should be completed before attending module 2.

### MODULE 2

#### Three Day Seminar

The syllabus for module 2 will include major topics incorporating acoustic theory, environmental measurement parameters, noise reduction techniques, legislation and standards, instrumentation and measurement. There is also a heavy practical element of the course to familiarise you with the techniques of measurement and the fundamental operation of instruments.

### MODULE 3

#### Environment Based Project

This can either be produced using results from measurements taken during module 2 or can be a project of your choice, which involves the production of an environmental noise survey report. This report is the basis of certification for the course and is marked by your tutor.

On successful completion, a certificate will be issued.

## WHO SHOULD ATTEND

If you are an **environmental professional** or have a responsibility for **environmental issues** with regard to the **impact of noise**, then this course is designed for you.

This will apply equally if you work in industry, local authority, environmental health, construction or consultancy

## COURSE AIMS

This course will give you a **detailed insight** into the current standards and legislation regarding environmental matters (e.g. **British Standard BS4142**, **Planning Policy**

**Guidance PPG 24** and **Mineral Planning Guidance MPG 11**) and will equip you to prepare a detailed environmental noise survey report. You will look in some detail at local authority implemented guidelines, environmental impact assessment and complaint management. The course also covers acoustic theory; **noise reduction techniques**; **instrumentation and measurement**.



## OBJECTIVES

- To ensure that you have an understanding of the principles of environmental noise
- To give an in-depth view of standards and legislation covering environmental noise
- To develop and understand the effects of factors that influence measurements
- To give an insight into instrumentation and practical noise monitoring
- To give you an insight into measuring background noise levels
- To develop fundamentals of noise theory
- To equip you with the knowledge and skills to write a competent assessment report

## WHAT WILL YOU ACHIEVE?

Your Academy Competent Person's Certificate is backed by over 15 years of training heritage and gives you just the evidence you need to provide suitability for the task. You will also be entitled to claim CPD points for CIEH, IEMA or other such organisations.



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# CONFINED SPACES

2 DAY COMPETENT PERSON COURSE

## COURSE OVERVIEW

The Course Will Cover The Following Subjects:

What Are Confined Spaces &  
What Are The Hazards?

What Are The Legal Requirements?

Risk Assessments And Safe Working Systems

The Correct Equipment Needed To  
Enter A Confined Space

Use Of Gas Detection Equipment

Use Of Escape Breathing Apparatus

Use Of Self Contained Working  
Breathing Apparatus

Use Of Ropes And Safety Harnesses

Use Of Tripods And Winches

P.P.E.- Hygiene Examination,  
Testing And Maintenance

Ventilating And Avoiding Unsafe Atmospheres

Personnel - Training, Effective  
Communication And Entry Procedures

Emergency Rescue Procedures

First Aid - The Correct Equipment,  
Dealing With Shock, Fractures, Controlling  
Bleeding, Cardio-pulmonary Resuscitation  
And Caring For Unconscious Casualties

Resuscitation Equipment And Its Purpose

Effective Record Keeping  
Practical Exercise And Assessments

## WHO SHOULD ATTEND

Anyone who has to **work in, or manage working in confined spaces**. This might be **maintenance staff, engineers, supervisors, managers, health and safety professionals** or those at director level who are responsible for employees who have to **work in such environments**.

## COURSE AIMS

The course is designed to ensure that delegates who need to **work in, or manage work in confined workspaces** understand the legal requirements, risk assessments and **safe systems of working**. This includes an understanding of **confined spaces and the mechanisms for human injury, air sampling/gas detection theory and practice**, creating plans for safe entry and working, full risk assessments and required documentation, competent understanding of the **correct equipment** and use, **emergency and rescue planning** and the **correct use of breathing apparatus and rescue equipment**.

## OBJECTIVES

- To equip you to write a competent plan for safe entry and working
- To ensure that you have the knowledge to complete a full risk assessment
- To provide you with the skills to develop emergency rescue procedures
  - To give you an insight into air sampling and gas detection
  - To develop in-depth understanding of the requirements of the law
- To ensure you can prepare documentation to satisfy an external inspector/auditor
  - To look in-depth at the correct equipment needed to enter a confined space
  - To cover the use of escape equipment, breathing apparatus and PPE

## WHAT WILL YOU ACHIEVE?

Your Academy Competent Person's Certificate is backed by over 15 years of training heritage and gives you just the evidence you need to provide suitability for the task.

You will also be entitled to claim CPD points for your professional memberships.



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# MANAGING ASBESTOS

2 DAY COMPETENT PERSON COURSE

## WHO SHOULD ATTEND

The **Control of Asbestos Regulations 2006** includes a requirement under regulation 4 for the management of asbestos in non-residential premises. This is in addition to the general requirements in the **regulations to manage the risk to employees from exposure to asbestos fibres**. This course is ideal for anyone who is in a **position of having to deal with asbestos**, whether building owners or tenants, duty holders or simply **anyone managing a premises where asbestos may be present**.

## COURSE AIMS

The course is designed to provide the skills necessary for **compliance with the Control of Asbestos Regulations 2006**. The course looks in detail at the regulations and what they mean in practical terms for **day to day dealings with asbestos**. There is also a practical element looking at the process of air-sampling to determine the amount of **airborne fibres present**. There is a focus on **Regulation 4** as it applies to non-residential premises including **how to identify and manage competent contractors, surveyors and analysts**; and time spent on the **identification of asbestos in buildings**.

## OBJECTIVES

- To look in-depth at the Regulations and associated Approved Codes of Practice
- To give an insight into the effects of asbestos on people
- To determine the best approach to discovering asbestos
- To facilitate an understanding of air sampling and monitoring for asbestos
- To define when the need for licensing arises
- To provide an overview of potential control measures
- To look at Respiratory Protective Equipment (RPE) for asbestos work
- To enable delegates to determine when more specialist help may be required and to identify and monitor competent contactors, surveyors and analysts.
- To equip delegates with the knowledge and skills required to write a competent risk assessment

## ASSESSMENT

It is important to demonstrate understanding of the issues and correct approach to assessment, so the assessment for this course is based on a work-based project. The assessment leads to a certificate of competence.

## COURSE OVERVIEW

The course is divided into 2 modules, which are structured in the following way:

### MODULE 1

#### Two Day Seminar

The syllabus for module 1 will include an overview of the requirements of the Control of Asbestos Regulations, Identifying asbestos, Workplace Exposure Limits, RPE, Licensing, sampling methodologies, control techniques and reporting protocols. There is also a practical element to the course to provide experience of measurement and sampling techniques.

### MODULE 2

#### Asbestos Risk Assessment

This report is to be produced by delegates of the two-day seminar and can either be based on information from module 1, or from real-world scenarios found at work. This project forms the basis for assessment of the course and is marked by your tutor.

A certificate is then awarded on successful completion.

## WHAT WILL YOU ACHIEVE?

Your Academy Competent Person's Certificate is backed by over 15 years of training heritage and gives you just the evidence you need to provide suitability for the task.

You will also be entitled to claim CPD points for your professional memberships.



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## COURSE OVERVIEW

The course consists of 2 modules, which are structured in the following way:

### MODULE 1

#### Three day course

The syllabus for module 1 will include an overview of the requirements of the COSHH Regulations, Workplace Exposure Limits, Sampling Methodologies, Control Techniques and Reporting Protocol. There is an in-depth practical element to the course to provide experience of measurement and sampling techniques as well as familiarisation with instrumentation and sampling equipment.

### MODULE 2

#### COSHH risk assessment report

This report is to be produced by delegates of the three-day seminar and can either be based on information from module 1, or from measurements and assessments made at work. This project forms the basis for assessment of the course and is marked by your tutor. A certificate is then awarded on successful completion.

## WHAT WILL YOU ACHIEVE?

Your Academy Competent Person's Certificate is backed by over 15 years of training heritage and gives you just the evidence you need to provide suitability for the task.

You will also be entitled to claim CPD points for your professional memberships.



# PERSONAL AIR SAMPLING & COSHH

## 3 DAY COMPETENT PERSON COURSE

### WHO SHOULD ATTEND

The Control of Substances Hazardous to Health (**COSHH**) Regulations 2002 (which apply to all EU companies) include a requirement for employers to carry out an **assessment of the risks** presented to their employees **through exposure to hazardous substances**. Clearly some companies will have more of an issue than others and will need to take measurements of the exposure levels in order to complete this assessment. This course is for any company that may have such a need. **Health and safety personnel, manufacturing staff or engineers are all potential attendees** although **no previous experience is required** so **the course will suit anyone** who can fulfil the role of a competent person.

### COURSE AIMS

The course is **designed to provide the skills necessary for compliance** with the Control of Substances Hazardous to Health (COSHH) regulations 2002. The **practical nature** of the course means **plenty of hands-on experience** to complement the theory. The basics of **air sampling and monitoring for dust, gases and vapours** will be studied as well as a close look at the regulations and their impact. Looking at **control measures** is a very important issue and the experience of the delegates and lecturer is drawn upon here. On completion of the course the **attendees will be able to develop and carry out a monitoring programme** appropriate to their own company requirements.

### OBJECTIVES

- To look in-depth at the regulations and associated Approved Codes of Practice
  - To give an insight into the effects of hazardous substances on people
  - To facilitate an understanding of the basics of air sampling and monitoring
- To develop an understanding of the available sampling methods, and monitoring strategy
  - To give a practical insight into air sampling and monitoring
- To show how sample results should be interpreted in relation to Workplace Exposure Limits
  - To provide an overview of potential control measures
- To enable delegates to determine when more specialist help may be required and to provide information on the various types of help currently available
  - To equip delegates with the knowledge and skills required to write a competent assessment report
- To give a brief introduction into the associated field of exhaust stack emissions monitoring, where monitoring techniques similar to those used for personal air sampling are often used

information & booking: Telephone 01723 584250





# CASTLE TRAINING ACADEMY

## Condition Monitoring & Predictive Maintenance

2 Day Competent Person Course

### *Who Should Attend*

Anyone with the responsibility for maintenance of plant and machinery in industry should attend this course. This might include those with management or supervisory roles or those engineers assigned to the task of coordinating or carrying out maintenance schedules and procedures.

This course is ideally suited to plant and production managers, maintenance engineers, fitters or any production staff with a part to play in the maintenance and efficiency of process equipment and machinery

### *Course Aims*

The aim of this course is to equip delegates to become instrumental in the increased efficiency of process plant and machinery. By understanding the fundamental principles of condition monitoring and maintenance planning, those attending can then play key roles in effective preventative maintenance, improved efficiency and increased productivity in their respective industries. The practical nature of Castle Training Academy courses will give delegates the insight they need to implement learning from day 1 following this training.



### *Objectives*

- To build an understanding of the principles of condition monitoring
- To give a background to vibration, temperature, other factors required
- To look at maintenance planning and the issues involved
- To develop an understanding of methods of monitoring and systems
- To show how information from monitoring is used to plan effectively
- To lead to an understanding of the measurable outcomes on efficiency and productivity.

### *Course Overview*

This 2 day course is seminar based with practical demonstrations and a variety of learning methods. The course first establishes some of the fundamentals of the parameters involved including vibration, temperature and power. These principles are then built-on to cover information handling and understanding, including baseline establishment, trend-analysis and trigger levels.

The second half of the course then looks into the use of gathered information to set up maintenance schedules and preventative programmes. This also involves an understanding of the benefits and measurability of the effect of such programmes.

### *What Will You Achieve?*

This course leads to a Castle Training Academy certificate of competence in condition monitoring and predictive maintenance.

**Tel: +44(0)1723 584250**



# CASTLE TRAINING ACADEMY

## Diagnostic Vibration Monitoring Course

2 Day competent Person Course

### *Who Should Attend*

If there are any engineers at your organisation who are involved in maintenance diagnosis or problem solving, then this course could be ideal for them. Timely and accurate diagnosis of maintenance failures is critical to ensuring minimum disruption to production processes so any person key to this process in the workplace will benefit from attendance.

### *Course Aims*

The primary aim of this course is to equip delegates with the skills required to carry out diagnostic vibration measurements, collate the data and make a diagnosis based on the information presented. To achieve this, a number of fundamental principles have to be understood and the course will address these areas.

### *Objectives*

- To provide a background to the principles of vibration
- To deliver the fundamentals of FFT (Fast Fourier Transform) analysis
- To give an insight into the principles of monitoring and measurement
- To provide hands-on experience of making measurements
- To develop and understanding of diagnostic evaluation
- To look into some depth at engineering solutions



### *Course Overview*

This seminar based course is intended to give candidates the skills required to make diagnostic measurements of the vibration from machinery and to interpret those measurements to lead to a fault diagnosis. The course will start by looking into the fundamentals of vibration and measurements including Fast Fourier Transform (FFT), a tool used in diagnostic monitoring. Evaluation of the data from measurements is also a key part of the course, as being critical to the process of diagnosis.

As there is a practical element to this course, much of the work can be demonstrated with live examples, which reinforces the learning and helps with implementation after the course.

### *What Will You Achieve?*

This course leads to a Castle Training Academy certificate of competence in diagnostic vibration monitoring.



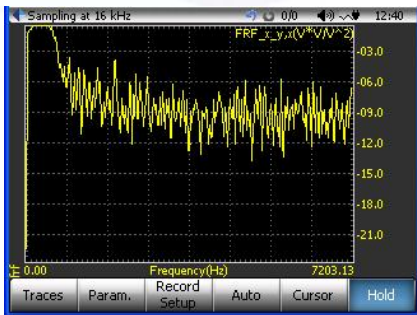
# CASTLE TRAINING ACADEMY

## Signal Processing and Software Analysis

### *Who Should Attend*

2 Day advanced skills course

This course is more for the advanced diagnostic engineer as it requires an understanding of the principles of diagnostic vibration monitoring. It makes an idea follow-up to the Castle Training Academy course of that name. Anyone who needs to implement a more advanced form of diagnostic analysis should attend this course. Consultants, Diagnostic Engineers, Process Engineers and Plant Managers are all likely candidates.



### *Course Aims*

The purpose of this course is to take an understanding of diagnostic vibration analysis to a more advanced level enabling delegates to give more accurate fault or problem diagnosis or to back-up diagnostic vibration monitoring.

The course looks in detail at advanced signal processing techniques and how software can be used to facilitate analysis. Delegates should leave this course fully conversant with the main methods of carrying out advanced diagnostic vibration analysis.

### *Objectives*

- To look at the principles of signal processing
- To build on an understanding of vibration fundamentals
- To give a detailed insight into signal processing techniques
- To look at the use of software based analysis packages
- To develop delegates knowledge of diagnostic analysis
- To provide hands-on experience and live demonstration where possible

### *Course Overview*

The development of the principles of diagnostic vibration analysis is the underpinning principle of this seminar-based course. A detailed look at signal processing and analysis will give delegates the tools they need to carry out more accurate fault diagnosis.

The course is also specifically geared to the use of software-based tools for diagnostic analysis. This follows a more in-depth session on signal processing techniques, which gives the knowledge required to get the most from any software packages.

### *What Will You Achieve?*

This course leads to a Castle Training Academy certificate of competence in signal processing and software analysis.

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“YOUR COMPETENT PERSON WILL NEED TO BE CAPABLE OF BRINGING TOGETHER AND PRESENTING ENOUGH INFORMATION ABOUT THE NOISE EXPOSURES TO ENABLE YOU TO MAKE CORRECT DECISIONS ON WHAT YOU NEED TO DO TO COMPLY WITH REGULATIONS...”

“...YOU MAY WISH TO ORGANISE SOME TRAINING FOR YOURSELF OR YOUR EMPLOYEE IN THESE AREAS (AS COVERED BY THE CONTROL OF NOISE AT WORK REGULATIONS 2005), SO THAT IN THE FUTURE YOU WOULD HAVE ACCESS TO THE NECESSARY SKILLS AND KNOWLEDGE IN-HOUSE.

WHETHER CARRYING OUT THE WORK YOURSELF, APPOINTING OTHER PEOPLE, OR A COMBINATION OF THE TWO, YOU NEED TO MAKE SURE THAT THE ASSESSMENT AND MANAGEMENT OF THE NOISE RISKS IS CARRIED OUT IN A COMPETENT MANNER BASED ON COMPETENT ADVICE. THIS MEANS MAKING SURE THAT ALL PEOPLE INVOLVED IN THE PROCESS HAVE THE NECESSARY TRAINING AND EXPERIENCE TO CARRY OUT THEIR PART OF THE WORK.”

HSE - CONTROLLING NOISE AT WORK - THE CONTROL OF NOISE AT WORK REGULATIONS 2005

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