PlantProtech™

BERAN
Proven Condition Monitoring Solutions

Vibration & Condition Monitoring Training Course

Get the very best from your Beran PlantProtech On-Line Vibration and Condition Monitoring Systems with this extensive training course.

Overview

The course is designed for anyone who currently uses (or is thinking of using) a Beran PlantProtech On-Line Vibration and Condition Monitoring System. No prior knowledge of vibration or condition monitoring theory is required.

Who Should Attend?

The course is designed for System Engineers, Mechanical Engineers and Operations Staff who have a requirement to understand vibration condition monitoring as part of their role.

Examples of previous attendees include:

- Mechanical Engineers
- Operations / Process Engineers
- Vibration Engineers
- Condition Monitoring Engineers
- Efficiency Engineers
- Site Engineers / C&I Engineers
- Beran System Managers

Learn How To...

- Understand and interpret vibration information quickly and correctly.
- Choose the best display formats for every situation.
- Harness the predictive power of historic data records and other advanced system facilities.

Whether you're new to the field of Condition Monitoring or have some experience already, this course is designed to enhance your understanding and effectiveness, with an excellent grounding in vibration analysis making your job easier and more satisfying.

Why Choose This Course

- Run by experts - the course is led by one of the UK's foremost vibration specialists, assisted by Beran staff.
- Each course is limited to approximately ten participants, and is paced to meet your needs, with plenty of opportunities to ask questions in order to enable you to get to grips with each new concept.
- Theory and practice are integrated for maximum effectiveness.
- Practical sessions include the use of a rotating mechanical rig to simulate common problems and their effect on vibration behaviour.
- Specifically designed for Beran PlantProtech users – you learn on the same systems as installed at your own plant.

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Course Agenda

Day One - Beran System Overview

- System Overview.
- Long-term Historic Trending.
- Real-time Display Selection and Use.
- Historic File Selection and Historic Displays.
- Advanced Alarming.
- System Concept Overview – dynamic channels, static, DCS links, channel set-ups, etc.
- System Data Acquisition Control and File Storage Configuration.
- Advance System Features – system defaults, FFT banding, run-out subtraction, vector difference, etc.
- System Configuration.
- System Management and Basic Fault-finding.

Day Two - Introduction to Vibration

- Basic vibration concepts – harmonics, magnitude and phase, subsync, FFTs, etc.
- What is acceleration, velocity and displacement?
- How is acceleration, velocity and displacement measured?
- What is the relationship between the measurements and why do we use different engineering units?
- How is order-locked data related to the 1/rpm signal?
- Basics of signal processing – Fourier Transforms.
- Condition Monitoring System display types – Orbit, Bode, FFT, Polar, etc. – and how they are used in the detection of plant failure modes.
- Plant failure modes detectable by vibration, including – oil whirl, imbalance, rubs, crack detection, gearbox analysis, etc.

Day Three - Advanced System Usage

- Vibration Case Studies using real data and rotating mechanical rig.
- Advance Historic Display Functions – overlay, multi overlay, colour Y-axis, etc.
- PlantProtech Alarm Types and Configuration.

Course Tutors

The course is led by one of the UK's foremost vibration specialists with more than 20 years' experience in the Power Industry. Assisting him will be experienced staff from Beran who will be able to share their accumulated wisdom, and also bring you fully up-to-date on the latest developments for Beran's PlantProtech product family.

Other information

Courses are held quarterly at Beran's headquarters near Barnstaple in Devon.

For details of price, course dates and availability, contact +44 (0)1805 624304 or email sales@beraninstruments.com.

Course Feedback

"An excellent course and well presented"

"Good introduction to Beran system and usage"

"An excellent course"

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