Modern Practical Maintenance Technologies

Introduction:

Modern Maintenance Technologies provides great opportunities to optimize the performance of your systems and equipment to achieve maximum return on investment (ROI). By reducing costs and downtime, while achieving high levels of safety and quality you will be able to get the best out of your assets.

This BTS training course introduces participants to the skills and knowledge areas of essential maintenance technologies and methodologies of today, associated with equipment, systems, people and management. It demonstrates both the background to each technology, and its practical application to achieve the best bottom-line results.

<u>This training course will highlight:</u>

- Asset Management : a business-like approach of maintenance
- International standards on Asset Management (PAS 55 & ISO 55000)
- Cost/benefit thinking
- Understanding risk and an introduction to a Risk Based Maintenance approach
- Decision support tools to make maintenance more effective
- Root Cause Analysis (RCA)
- Understanding audits, maintenance assessments and benchmarking as a means to improve your asset & maintenance management process

Training Objectives

At the end of this training course, participants will learn to:

- Apply modern maintenance technologies & methodologies in the appropriate way
- Understand how each of these technologies contribute to maintenance efficiency
- Explain how these technologies interact with and support each other
- Achieve the best results in practicing these technologies
- Develop an action plan to utilize these technologies in their own areas of responsibility, fitting them into the overall maintenance strategy and to measure the benefits

Target Audience

This training course is suitable to a wide range of professionals involved in the area of maintenance contracts, but will greatly benefit:

- All professionals involved in Maintenance, Engineering and Production
- Anyone who wishes to update themselves on Modern Maintenance Technologies, judge the suitability of these technologies for their needs, and learn how to implement them for the benefit of their organizations

Daily Agenda

Day One: Introduction & Overview – Challenging the Traditional Approaches to Maintenance

- Asset Management: a business-like approach of maintenance
- Cost/benefit thinking: spending the right amount of maintenance
- Applying basic optimization tools to support cost/benefit decisions
- Introduction to risk
- Risk in maintenance & operations

Day Two: Risk Based Maintenance (RBM)

- Deterioration: the way assets could fail
- Representation of risk
- The seven steps of Risk Based Maintenance (RBM) – The Methodology
- Failure behaviour
- Choosing the right maintenance task

Day Three: Root Cause Analysis (RCA)

- Multiple realities
- Subjective views
- Effective problem solving
- Cause and effect relations

- RCA methodologies – Examples and Application

Day Four: Process Audits, Maintenance Assessments & Benchmarking

- Where are we now – introduction to process audits, benchmarking & assessments
- Process audit – basic theory
- Auditing in practice
- Maintenance assessment – basic theory
- Execution of a maintenance assessment of the work planning & control process
- Benchmarking – basic theory
- Benchmark studies
- How to interpret benchmark results

Day Five: Performance Management & Decision Support Tools

- Defining performance
- Applying specific performance indicators and process parameters to measure the performance of assets, activities and processes
- Performance management: influencing the behaviour of people to gain better results
- Applying sophisticated decision support tools to optimize maintenance performance
- Practical exercises with ASRi simulator