Training Portfolio 2014

Dates and venues at www.maintenanceconsultants.co.uk or call 01343 821438

Introduction

Welcome to the CSA Ltd 2014 training portfolio.

CSA were formed in 2000 and from the outset have been delivering training and consultancy services for a wide range of clients from all business and service sectors. Clients range from SME to blue chip commercial organisations and from central government agencies to local public and voluntary sectors. CSA also undertake international training seminars and have delivered specialist training in both the Middle and Far East as well as throughout Europe.

Our instructors are experienced professionals in their field and have developed and delivered training verified by independent bodies including the Royal Environmental Health Institute of Scotland, Enterprise Ireland, The City and Guilds Institute and the Institute of Leadership and Management.

We have consolidated our range of Maintenance Training courses for 2014 based on the demand we experienced last year. An increasing number of clients are utilising our 'in house' courses, which can be honed to your specific requirements and operating environment (see page 7 for more details).

Finally, if you do not find exactly what you need, we have a history of developing specialist training courses to specific client needs and would be happy to talk to you to see how we might meet your needs.

Special Offers

Look out or sign up via the website for special offers including book one place on one of the scheduled Maintenance Management courses and get 50% discount on a second place.

Colin M Sanders

Director CSA Ltd

Contents

Category/Title	***Page***
Maintenance Strategies to meet Business Needs	4
Best Practice Maintenance Management (Work Control, Planning and Scheduling)	5
Continuous Improvement in Maintenance	6
'In house' and on demand Maintenance courses	
Target: Zero breakdowns (Failure Modes Effects Analysis & Reliability Centred Maintenance)	8+9
An introduction to Condition Based Maintenance	10
Writing Great Planned Maintenance Routines	11
Management Systems to meet Compliance Needs	12
An Introduction to Lean	13
Introduction to Process Mapping and Workflow planning	14
Problem Solving and Root Cause Analysis	15
Team Leadership and Management	16
Introduction to Overall Equipment Effectiveness (OEE)	17
Developing Operator Asset Care programmes	18

Maintenance Management

Maintenance Strategies to meet Business Needs

Do you struggle to make a case for the contribution of Maintenance to the business? This is a common and historic problem and leads to difficulties for the maintenance Manager in securing budgets, capital sums and resources to development Continuous Improvement. Are your customer's needs understood and do you and they share priorities, urgency and goals?

Course Abstract:
The course examines how the Maintenance Manager can make a business case for driving maintenance improvement. It also explores adopting shared goals and priorities and just what customers could/should realistically expect whilst supporting and focussing on the drivers in the organisation. The course looks at how maintenance customers typically perceive failure and the different thinking that demands to deliver best in class maintenance services. Capability, competency and risk management techniques are addressed.

This includes…

- Making a Business Case for Maintenance
  - Understanding Business Drivers
  - How to demonstrate Maintenance Contribution
  - Key Performance Indicators
  - Overall equipment Effectiveness

- Meeting Customer Needs
  - Line/operational cover
  - Optimising information exchanges
  - Managing Maintenance team capability and competence

- Sharing Prioritisation - Establishing a Risk Based Maintenance Strategy
  - Risk
  - Risk to Criticality
  - Conducting a Criticality Analysis and maintaining the system

- Using Criticality to format an Overall Maintenance Strategy
  - The Maintenance options
  - Targeting the options
  - Other uses of criticality

Target Audience:
Senior Operational Managers, Maintenance Managers, Maintenance supervisors/planners

Course Outcomes:
Understanding how to make a business case for Maintenance initiatives; targeting maintenance to customer and stakeholder needs; an understanding of Risk based Management strategies and how they can bring Production and Maintenance to share goals and priorities.

Duration: 2 Day ***Guide price:*** £575

Maintenance Management

Best Practice Maintenance Management

(Work Control, Planning and Scheduling)

Do you have or are you looking to instigate a practical maintenance infrastructure and supporting systems? Not sure how to determine your resource needs or initiate Continuous Improvement? This comprehensive course addresses the key building blocks to an asset (machine) care management programme and service delivery.

Course Abstract:
This course demonstrates how to align maintenance to organisational strategy and then, economically, establish the maintenance departmental, tools, techniques and recording systems to sustain and continuously improve customer service and asset performance. The course is supported by interactive exercises to provide experience in some of the essential functions of a maintenance department, this includes.

- Understand what drives maintenance outlook, stakeholder expectations, and how to make the case for maintenance contribution
- Developing a practical Maintenance infrastructure
- Setting Maintenance Policies
  - Equipment classifications
  - Asset registers
  - Functional locations
  - Additional equipment information needed by planners
- Understanding Maintenance Strategy
- Practical workflows and their control
- Life cycle plans and Logistic Support
- The sources of planned work
- The scope of work instructions
  - Terminology
- Estimating workload
- Defining Customer requirements
  - Scheduling planned work
  - Meeting Customer needs
- Scheduling – getting the Planned Work Done
  - Maintenance Management Systems
  - Long and short term forecasts
  - Opportunity maintenance
- Continuous Improvement
  - Where does planned work come from
  - Aims and objectives
  - An overview of Failure Modes and Effects Analysis

Target Audience:
Senior Managers, Maintenance Managers, Maintenance Supervisors, Planners, Key Operations Supervisors, CMMS Administrators/users, Materials Managers/Supervisors

Course Outcomes:
Understanding the systems necessary to sustain effective maintenance performance. The strategic/operational relationship regarding planning and scheduling and how to ensure maintenance effort is aligned to achieving organisational goals.

Duration: 3 Day ***Guide price:*** £750

Continuous Improvement in Maintenance

Are you reliant on machinery that is increasingly being pushed to meet higher production targets, or becoming increasingly unreliable or costly to run? Are you trying to drive Continuous Improvement but not sure where to start?

Course Abstract:
The course examines the need for setting a starting point for Continuous Improvement, establishing reliable and useful readings of performance. What can and does go wrong. Defining and addressing failure and establishing practical reviews. The course includes…

- Measures that matter
- Targeting Improvement
  - Key Performance Indicators
  - SMART Targets
  - Overall Equipment Effectiveness
- What can and does go wrong
  - A Functional approach
  - The Whys and How's of failure
  - System failures
  - Asset/machine failures
- Driving Improvement
  - Making the financial case for time/resource
  - Focus on what matters
  - Breakdowns and what we can learn from them
  - How things fail and Why they fail
  - Root Cause Analysis
- Planned Maintenance – aims and objectives
  - Standardisation
  - Content Development
  - Format
  - Setting up PM review programmes

Target Audience:
Engineering/Maintenance Managers, supervisors/planners, SME Directors with machine assets

Course Outcomes:
An understanding of Maintenance Continuous Improvement techniques that reflect maintenance/production shared goals. Knowing what can and does go wrong and how to address the Root Causes of the problem to address and eliminate recurrence. An appreciation of best practice Planned Maintenance content management, reviews and improvements.

Duration: 2 Day ***Guide price:*** £575

‘In house’

and

‘On demand’

Training Courses

The following section contains examples of courses we offer ‘in house’ for clients.

Being experienced maintenance and operations managers we understand that releasing key personnel from the workplace for days at a time can be a real problem. In house training can be delivered locally, on site if practicable; in modules if required, or through other medium**.**

We are more than happy to talk to you about any training requirements and if you have any questions or do not see exactly what you need, please ask.

Maintenance Management

Target – Zero Breakdowns

(FMEA and RCM Application)

Can zero breakdowns be achieved; maybe not (like world peace), but that should not stop us trying! Where do we start? Identifying and targeting the chronic and the acute incidents that lose production and ensuring that we get no repeat breakdowns. How do we identify these, who does this, when, how and what actions are required to prevent these breakdowns occurring?

Course Abstract:

This course addresses the causes of breakdowns and their impact on production. It reviews the 'whys' and 'haws' of equipment and process failure, how that data should be captured, trended and reported. The course examines the practicalities of capturing data and the discipline needed both in data input and analysis and trending of breakdowns. Basic problem solving and analysis techniques are introduced with exercises in the use of each. The course introduces specialist maintenance analysis tools of Reliability Centred Maintenance and Failure Modes and Effects Analysis and offers experience in their application through exercises. The tools concentrate on formulating maintenance plans targeted at deterioration characteristics, (the pre-cursors to breakdown), what kind of maintenance tactic will identify and address deterioration, how often it should be carried out, by whom and with what skill set.

The course covers…

- Why and How things fail
  - Equipment functions and performance standards, functional boundaries
- Failure patterns
- P – F interval
- Reporting and capturing Data

- Maintenance options
  - Condition Based or Predictive Maintenance
  - Planned Maintenance
  - Functional Testing
  - Continuous Improvement or ultimately Design out
  - Run to Failure/Nil Maintenance

- Problem solving and analysis tools

- FMEA/RCM
  - Targeting FMEA/RCM
  - Required outcomes
  - An FMEA/RCM model
  - The 10 Steps to FMEA/RCM Application
    - Desired outcomes
    - PM format and content
    - Practical application
- Examples and exercises

Check out dates and venues at www.maintenanceconsultants.co.uk or call 01343 821438

Target – Zero Breakdowns
(FMEA and RCM Application)

Continued from page 8

Target Audience:

Senior Managers, Maintenance Managers, Maintenance Supervisors.

Course Outcomes:

An appreciation of chronic and acute problems, targeting areas for improvement, objective problem solving/breakdown investigation. Introduction and experience in the application of a stepped methodology for identifying deterioration characteristics and designing tasks to address them, resulting in the production of draft maintenance procedures. Each candidate will be issued with a copy of the stepped methodology ready for application.

Duration: 3 Day

Maintenance Management

An introduction to Condition Based Maintenance

Condition Based Maintenance (CBM) overcomes the problems associated with unnecessary intrusive maintenance. It is not all highly complex, simpler applications can be undertaken at first line, it is highly effective and economic if it is properly targeted and the outputs are used correctly. CBM can be summarised as "if it ain't broke (and you can prove it) don't break it".

Course Abstract:

The course is designed for those looking to introduce or expand a CBM programme. It examines the assets that should be targeted, how you might arrive at deciding to use CBM, existing data you might use to monitor condition, using first line or operator level data and how to integrate CBM tasks into a maintenance programme. Additionally the course introduces a range of the more common applications, how and where they are normally applied and what to look for in condition reports.

- The principle of CBM
  - CBM and Condition Monitoring
  - Different failure patterns
  - Determining frequency
  - Considering 'Confidence of detection'
- Targeting CBM
  - Cost Benefit analysis based on consequence of loss
- Integrating CBM with your maintenance programme
  - Workflows
  - Contracted or in house capability
- Applying CBM at First Line
  - Maintenance personnel
  - Operators
  - Using production/plant readings to monitor equipment condition
- An introduction to some Condition Monitoring techniques
  - Oil analysis
  - Thermography
  - Vibration analysis

Target Audience:

Senior Operational Managers, Maintenance Managers, Maintenance supervisors/planners

Course Outcomes:

Understanding how to target and integrate CBM, how and where it can be applied, an appreciation of the more common techniques, condition reporting and intrusive maintenance triggers.

Duration: 1 Day

Maintenance Management

Writing Great PMs

It is possible to write a great Planned/Preventative Maintenance routine. If you rely on inherited outputs from CMMS or original equipment manufacturers do they fit your current requirements? Not sure - still getting break downs and (worse) repeat breakdowns? Why?
Is the current content of your PMs too vague/not detailed enough, unpredictable regarding time they take to do or producing different results dependent upon who does them?
Knowing precisely what needs to be done, who will do it, when, how long it should take, is all crucial information that, managed consistently, will help your maintenance department run more efficiently and effectively and so assist production achieve all their outputs.

Course Abstract:

Understand typical maintenance workflows, equipping the maintenance department to deliver great planned maintenance. What a good PM regime should aim to achieve. Applying 5'S'; terminology that eliminates ambiguity in task description. Maintenance resource; team/personnel skills/competency matrices. Techniques and tips for efficiently and effectively writing and reviewing successful PMs into the maintenance regime/plan. The course covers…

- Defining your current and desired performance
- Workflows supporting performance
- Pre-requisites of good PM application
  - Asset registers and identification
  - Equipment classification, criticality and groups
  - Resources and Competencies
  - Standards and standardisation
  - Recording
  - Establishing frequency
- Writing PMs
- Change Controls
- Review to improve

Target Audience:

Senior Managers, Maintenance Managers, Maintenance Supervisors/Planners.

Course Outcomes:

Understanding the structure required to operate and manage an effective PM programme. Resource planning to achieve the programme. Understanding PM content that achieves desired results. Establishing and maintaining standards. Driving Continuous Improvement and managing change.

Duration: 1 Day

General Management

Management Systems to meet Compliance Needs

It is almost impossible today to run or manage a business without being required to demonstrate adherence to standards. They may be; legislative (Health & Safety, Environmental, etc), quality, or just organisational directives. All need to be 'auditable'. This course addresses methods of managing, demonstrating and maintaining such compliance systems.

Course Abstract:

Defining compliance requirements; associated business risk, recording, reviewing, corrective and preventive actions and the practicalities of managing systems including…

- Work flow management
- Roles and Responsibilities
- Competencies
- System management tools
- Reports
- Monitoring performance
- Continuous Improvement

Target Audience:

Senior Managers, Line Managers, Supervisors from industry, service and public sectors.

Course Outcomes:

An appreciation of general compliance system structures, understanding what the auditor is looking for, meeting audit requirements and how to fine tune and continuously improve compliance system performance.

Duration: 1 Day

General Management

An Introduction to Lean

Lean is all about the elimination of waste; saving time and therefore money. This course looks at focusing resources to achieve maximum value by fine tuning processes within the workplace. Business and services to be competitive must work as efficiently and effectively as possible with just the right amount of resource (man power, parts, etc) to deliver the service/product to the required quality/standard.

Course Abstract:

Determining what is waste, developing a safer environment, monitoring performance, driving improvement with extensive exercises demonstrating the basic concepts. Tools and techniques include…

- Determining process inputs and outputs
- Value added/Non value added
- Introduction of 5S
- Resource planning
  - People
  - Process
  - Plant (equipment)
- Monitoring performance
- Continuous Improvement

Target Audience:

Senior Managers, Line Managers, Supervisors from industry, service and public sectors.

Course Outcomes:

An appreciation of the tools and techniques available to carry out Lean within the Company/working area to improve efficiency, reduce cycle times, meet the market demands, implement improvements to the process, satisfying customer requirements regarding delivery and lead time whilst reducing inventory.

Duration: 1 Day

General Management

An Introduction to Process Mapping and Workflow planning

Knowing what needs to be done, where it comes from, where it goes to, who does it and by when are integral to our everyday work, but too often these procedures are documented in methods that do not allow ready reference or a clear view of the bigger picture. They may also fail to clearly identify the interactions, cross referenced information at each step or the crossover point between departments.

Course Abstract:

Techniques and tools for efficiently and effectively defining/capturing workflows. Assessing current workflows and optimising them, defining processes; the tasks, people and actions involved and 'mapping' the outcome. The course covers…

- Hierarchies
- Workflow to Process
- Defining Process
- Process Mapping (current and desired states)
- Information/data sources required
- The RACI methodology
- Measuring process performance
- Benefits of Process mapping
    - Roles and Responsibilities
    - Competencies
- Exercises in process mapping

Target Audience:

Senior Managers, Line Managers, Quality and Compliance Managers from industry, service and public sectors.

Course Outcomes:

Capturing/designing workflows; an appreciation of the power of process mapping, how to evaluate and improve current processes, aligning processes to required performance outcomes, experience in applying process mapping; understanding what is needed to make a process work.

Duration: 1 Day

General Management

Problem Solving and Root Cause Analysis

Things go wrong. That's life; but there should be no excuse for repeat problems and some things, should they go wrong have such dire consequences that we really must make every effort to combat failure (or have contingency plans in place) before it happens. How?…

Course Abstract:

The problem with problems; the way we think, how to be objective, cause and effect, tools methods and exercises in the application of techniques including…

- Defining problems
- Gathering data
- The right team
- Brainstorming
- Why Analysis
- Cause and Effect
- Bringing it together with RCA
- Identifying useful outcomes
- Actions arising from outcomes

Target Audience:

Senior Managers, Line Managers, Incident investigation teams, Quality, Health & Safety and key improvement personnel from industry, service and public sectors.

Course Outcomes:

An appreciation and experience in the application and facilitation of objective incident/problem solving methods.

Duration: 1 Day

General Management

Team Leadership and Management

The Peter principle states that… 'people are promoted to a level of incompetence'.
Yet these people were probably chosen for promotion because they were very good in their previous position; often a position they had trained for and gained experience in throughout their working lives. BUT just what now qualifies them to lead a team, manage the department's workload or negotiate on a par with their new found peers? This course equips the new manager/team leader with the essential tools and techniques.

Course Abstract:

Developing a strategy, managing work load, managing people, team and individual development, monitoring and reporting performance, driving improvement and general management tools and techniques including…

- Defining customer need
- Resource planning
  - People
  - Process
  - Plant (equipment)
- Managing work load
- Delegation
- Developing Team and individual competencies
- Understanding team roles and relationships
- Goal setting
- Management reporting
- Monitoring performance
- Continuous Improvement

Target Audience:

Senior Managers, Line Managers, Supervisors from industry, service and public sectors.

Course Outcomes:

An appreciation of the tools and techniques available to assist the manager/those with team leadership responsibility in their own performance.

Duration: 1 Day

Operational and Service Delivery

Introduction to Overall Equipment Effectiveness (OEE)

Why is OEE becoming a key indicator in production performance management? What can sustainable improvements in OEE deliver? What are key success factors and pitfalls? How do you start to implement OEE, what can you realistically expect from it? This course addresses all these questions and demonstrates how OEE might be applied. Find out why more and more companies are adopting this approach.

Course Abstract:

The course provides information on the implementation of OEE as a performance measure and the tools and techniques available to reduce the losses that adversely affect the elements that constitute OEE. It addresses how these constituent elements are measured, trended and used to identify realistic improvement goals. Each candidate is given the opportunity to identify a subject within their own workplace in which OEE might be implemented. The course covers…

- Introduction
- Why OEE
- Implementing OEE
- Supporting processes/systems
- Measuring OEE
  - Exercises
- Improving OEE
  - Goal setting
  - Supporting Competencies
  - The 6 big losses
  - Availability
  - Performance
  - Quality
- The Rewards

Target Audience:

Senior Management teams, Line Managers, Line Supervisors/Planners.

Course Outcomes:

A thorough understanding of OEE principles and the practicalities of application, the necessary OEE development framework, success factors and pitfalls. An appreciation of possible barriers to acceptance and implementation and the mindset required. OEE led continuous improvement, SMART targets, influences on OEE performance, targeting OEE components to improve performance.

Duration: 1 Day

Operational and Service Delivery

Operator Asset Care Programmes

Are you thinking of introducing Operator Asset Care programmes? What are they, what are the hurdles to be overcome, the benefits you might reasonably expect and just how do you go about developing and introducing and then managing such a programme?

Course Abstract:

Understand the potential benefits, the preparation and training (and materials) necessary. How to integrate OACP's into the Maintenance programme, how to establish and maintain standards etc. See some examples of successful OACPs the problems encountered and overcome. The course covers…

- Introduction
- Why OACPs
  - Advantages
  - Why not?
- The basic principles
  - Reasonable expectations
  - Supporting Competencies
  - Work Instructions and visual aids
- Targeting and Developing a programme
  - Where to start
  - Establishing a programme development process
  - Standardisation
  - Training requirements
  - Producing a guide
- Integrating and managing OACPs in Maintenance Management systems
  - Maintaining quality
  - Reviews

Target Audience:

Senior Maintenance and Operations Management teams, Line Managers, Line Supervisors/Planners.

Course Outcomes:

A thorough understanding of OACPs principles; the practicalities of application, the framework necessary to development and sustain a successful application and an awareness of success factors and potential pitfalls.

Duration: 1 Day

01343 821438

www.maintenanceconsultants.co.uk

Specialised Consultancy and Training Services

Training Providers

Plant Maintenance Management Specialists

Compliance & General Management Systems

Business & Project Support Services

Lean applications

CSA is the trading name of Colin Sanders Associates Limited.

Registered Office: 12 East Street. Fochabers. Moray. IV32 7DS. Tel: 01343 821438

Registered in Scotland No. SC404981. Director Mr. Colin M. Sanders

Check out dates and venues at www.maintenanceconsultants.co.uk or call 01343 821438