



**EuroMaTech**

Training Seminars & Conferences



An Intensive 5-Day Training Seminar On

# **Pre-Startup Audit:**

## **Evaluating, Determining and Implementing Effective Risk Control Measures**

20 - 24 Oct 2019, Dubai  
07 - 11 Jun 2020, Dubai  
18 - 22 Oct 2020, Dubai



[www.euromatech.com](http://www.euromatech.com)

An ISO 9001:2015  
and ISO 29990:2010  
Certified Company

# Pre-Startup Audit:

## Evaluating, Determining and Implementing Effective Risk Control Measures

### INTRODUCTION

Start-up operations are riskier than normal, routine operations. The process needs to be planned and managed. The Pre-Start-Up Audit (PSUA) or Pre-start-up review (PSUR) is a part of the planning process for projects during which the safety and functionality of the process itself is checked to ensure that all systems should function as intended and that potential hazards have been considered and can be dealt with. This process is used in projects related to construction, reconditioning or repair of equipment and facilities designed to process hazardous substances.

The Pre-Start-Up Audit (PSUA) process is commonly found in oil & gas, and petrochemical projects and comprises a combined safety and operability audit to ensure that hydrocarbons or other hazardous materials can be safely introduced into a newly constructed (or reconstructed) plant, asset or facility for the first time.

Furthermore, Pre-Start-Up Audit is used to assure the owner or operator of that plant, asset or facility that it is capable of starting, controlling and stopping it safely, efficiently and without harm to people, the plant itself or to the environment.

**In this EuroMaTech training course, delegates will advance their knowledge and skills by:**

- Developing an understanding of the risks associated with start-up operations
- Considering the control measures that are required to deal with the hazards
- Learning the principles of the audit process
- Being able prepare and conduct effective Company and contractors HSE Audits
- Enhance your background for relevant HSE issues
- Gain necessary skills in carrying out physical site inspections
- Prepare HSE audit reports

### WHO SHOULD ATTEND?

**The Pre-Start-Up Audit training course is suitable to a wide range of professionals but will greatly benefit:**

- Professionals with responsibility for managing contractors
- Those with responsibilities for plant start-up, etc.
- Production, process, maintenance, and HSE personnel
- Line-managers and senior supervisors
- Safety Team Leaders and Health & Safety Champions

### PROGRAMME OBJECTIVES

- Understand the importance of Policies, Procedures, and the Risk Assessment Process
- Identify potential plant, process and work task related hazards and risks associated with start-up operations
- Understand the relevance and the importance of human factors, such as errors and violations, in incident causation
- Understand the audit process and relate this to Start-up Operations
- Be part of the Audit Team

### TRAINING METHODOLOGY

Delegates attending the Pre-Start-Up Audit training course will learn through active participation in sessions based on tutor led discussions and syndicate exercises. Delegates will take part in topic exercises, case studies and will be required to provide group input to the syndicate sessions.

### PROGRAMME SUMMARY

The purpose of the Pre-Start-Up Audit training course is to provide delegates with an understanding of how process safety failures can occur and how they can be prevented, in relation to Start-up Operations. Delegates will gain audit skills and knowledge to successfully analyse new and existing risk control measures.

This EuroMaTech training course will show delegates how they can evaluate, determine and implement effective risk control measures to prevent serious incident occurring and / or re-occurring.

# PROGRAM OUTLINE

## DAY 01

### Introduction to Safety and to the Audit Process

- Simple case study (*hole*)
- Why are Process Start-ups different?
- Health and Safety Drivers within the organisation
- The Role of Policies and Procedures
- The Principles of Risk Assessment
- Process Safety and Personal Safety
- Case Study: Understanding the Process (*fully*)
- Project Health, Safety & Environmental Plans
- HSE Monitoring Plan
- Introduction to the ABC(D) of the Audit Process

## DAY 02

### Incident Mitigation and Emergency Response

- Incident Causation and the role of "Barriers"
- Checking the integrity of the "Barriers"
- Introduction to SMART objectives
- People are part of the process - *Human Factors - Errors and Violations*
- Case Study: Errors and Violations
- Emergency Response (*part of the process*)
- Case Study: Emergency Responses
- Audit your Emergency Responses and Procedures

## DAY 03

### Control of Contractors

- The role of Contractors
- Case Studies: lack of control of contractors
- Selection and Control of Contractors
- Auditing Contractors
- Quantitative audit systems
- Working with contractors and other organisations
- Permit-to-work Systems
- Introduction to pro & reactive monitoring

## DAY 04

### Reactive Monitoring and Proactive Monitoring

- Review of audit principles
- Reactive Monitoring
- Proactive Monitoring
- Designing Audit Questions and challenging the answers
- Looking at the Process and predicting failures
- Case Study (*tank filling*)
- Bow Ties and Barriers: points to audit
- Safety Culture Awareness

## DAY 05

### Case Studies and Review

- Case Study: *Wrong tools lead to major fire during loading / unloading operations*
- A disastrous Process Start up - *but all the failures could be predicted*
- The importance of Reactive Monitoring, Proactive Monitoring, Safety Culture, etc.
- Using the audit process and to improve safety
- A final word on "Barriers" - *a review of their importance and auditing*

## IN-HOUSE TRAINING

EuroMaTech is capable of conducting this training programme exclusively for your delegates. Please e-mail us on [inhouse@euromatech.ae](mailto:inhouse@euromatech.ae) for further information and/or to receive a comprehensive proposal.

## QUALITY CERTIFICATIONS & ACCREDITATIONS

EuroMaTech is proud to be associated with the following accreditation bodies:



The PMI® Registered Education Provider logo is a registered mark of the Project Management Institute, Inc.

# Pre-Startup Audit:

## Evaluating, Determining and Implementing Effective Risk Control Measures

✓	Date	Venue	Fee(\$)
	20 - 24 Oct 2019	Dubai	US\$4,950
	07 - 11 Jun 2020	Dubai	US\$4,950
	18 - 22 Oct 2020	Dubai	US\$4,950

*This fee is inclusive of instruction materials, documentation, lunch, coffee/tea breaks & snack. All Fees are subject to 5% Value Added Tax (VAT).\**

### Your Details

Name (Mr/Ms):.....  
Position:..... Organisation:.....  
Address:.....  
.....  
City / Country: .....  
Telephone / Fax: .....

### Mode Of Payment

- Please find enclosed a cheque made payable to EuroMaTech  
 Please invoice me  
 Please invoice my company as follows:

Contact Name: .....  
Company Name: .....  
Address:.....

#### Documentation

High Quality material has been prepared by the Seminar Leader for distribution to delegates. In addition, a special note pad to facilitate note taking will be provided.

#### Certificates

A Certificate of Completion will be issued to those who attend & successfully complete the programme.

#### Schedule

Our Course timings commences at 08:30 and concludes at 14:00, followed by lunch on a daily basis.

#### Hotel Accommodation

EuroMaTech has negotiated special rates for a limited number of rooms in the hotel. Early registration will help to secure a room at the reduced rate.

#### Registration & Payment

Please complete the registration form on this page & return it to us indicating your preferred mode of payment. For Further Information, Contact Your Nearest EuroMaTech Office.

#### Cancellation Policy

Request for seminar cancellation must be made in writing & received at EuroMaTech three weeks prior to the seminar date. A U.S.\$250/- processing fee will be charged per delegate for each cancellation. Thereafter, we regret that we are unable to refund any fees due, although in such cases we would be happy to welcome a colleague who would substitute for you.

#### Disclaimer

EuroMaTech reserves the right to alter the content, location of the Seminar, or the identity of the speakers in case of events beyond our control.

**\*VAT Announcement:** The Government of UAE have introduced Value Added Tax (VAT) on goods and services from 01-January-2018. In compliance with the legislation issued by the UAE Government, we will be applying a 5% VAT on the fees for all our programs and services offered from January 2018 as applicable and stipulated in the FTA circulars.

### Contact Us:

#### U.K. Office:

109 Mount Pleasant  
Liverpool L3 5TF, United Kingdom  
Telephone: +44 151 709 7100  
Fax: +44 151 709 7181

#### Middle East Office:

P.O. Box 74693  
Dubai, United Arab Emirates  
Telephone: +971 4 4571 800  
Fax: +971 4 4571 801

#### Email Address:

info@euromatech.ae

#### Website:

www.euromatech.com



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