

Modern HAZOP Process



www.blackbird-training.com



Modern HAZOP Process

Ref: 3276_137856 **Date:** 17 - 21 Mar 2025 **Location:** Casablanca (Morocco) **Fees:** 3300

Euro

Introduction

It is universally recognised that for any company to succeed it must take a proactive approach to risk management. Over the last few years Companies and a number of Countries legislators have been focusing on Process Safety as a method to reduce the risks posed by hazardous industries. Process Hazard Analysis PHA is recognised as being a critical tool in the implementation of a successful risk management system. As Hazard and Operability HAZOP studies are now recognised world-wide as being the qualitative risk assessment methodology of choice in the Process Industries, there will be additional focus on this specific aspect of Process Hazard Analysis.

Course Objectives of HAZOP Process

- Understand the concepts of Risk Assessment and Risk Management
- Understand the estimation and evaluation of risks Qualitative, Semi-Quantitative and Quantified Risks
- Techniques for Hazard Identification and Analysis Check-Lists, Risk Profiling, HAZOP, FMEA and Task-Based Risk Assessment
- Cause-Consequences Analysis The Role of Fault Trees and Event Trees in Accident Prevention
- Understand the requirements of a Team Leader or Facilitator, scribe and team members during HAZOP studies

Course Outlines of HAZOP Process

Day 1

Introduction to Risk Assessment

- Course introduction: delegate and tutor introductions; course objectives
- The concepts of hazards, risk and risk assessment
- · Methods for risk evaluation
- Integrating risk assessment within Risk Management
- Qualitative, Semi-Quantitative and Quantitative Risk Assessment methodologies
- Feedback and review of Day 1

Day 2

UK Traininig PARTNER

Head Office: +44 7480 775 526 | 0 7401 177 335 Email: training@blackbird-training.com Website: www.blackbird-training.com



Risk Assessment Techniques: HAZOP

- Introduction to hazards identification and analysis techniques
- Techniques for hazard identification and analysis HAZOP
- Where and when to use HAZOP and the requirements for a successful HAZOP study
- Team composition for HAZOP studies
- Guide words and process variables used for HAZOP studies
- Syndicate exercise application of HAZOP to relevant processes
- Report back and review of Day 2

Day 3

Hazop Leadership Techniques

- HAZOP team leader/facilitator requirements
- HAZOP scribe requirements
- Facilitating HAZOP studies, do's and don'ts
- Information required to allow successful HAZOP studies
- Case study where each delegate has the opportunity to facilitate a HAZOP meeting
- Review of commercial software used for HAZOP and Management of Change 'MOC'
- Report back and review of Day 3

Day 4

Consequence Analysis

- Theory behind the fire, explosion and toxic dispersion modeling utilized in Quantitative Risk Assessments
- Types of fires and their effects on people and equipment
- Types of explosions and their effects on people and equipment
- Review of software available for consequence calculations
- Report back and review of Day 4

Day 5

The Role of QRA

- Introduction to Quantified Risk Assessment "QRA"
- The role of Event Tree Analysis in scenario development
- The role of Fault Tree Analysis for multi-causation analysis
- Applications for ETA and FTA
- · Failure data for use in ORA's
- Societal Risk and Individual Risk
- Review of software available for Quantitative Risk Assessments
- Report back on day 5 and discussion
- Programme review and the way ahead



Head Office: +44 7480 775 526 | 0 7401 177 335

Email: training@blackbird-training.com Website: www.blackbird-training.com



Blackbird training cities

Accra1 (Ghana) Amman (Jordan) Amsterdam (Netherlands) Annecy (France) Baku (Azerbaijan) Bali (Indonesia) Bangkok (Thailand) Bangkok (Thailand) Barcelona (Spain) Batumi (Georgia) Beijing (China) Beirut (Lebanon) Berlin (Germany) Birmingham (UK) Bordeax (France) Boston, Massachusetts (USA) Brussels (Belgium) Cairo (Egypt) Cape Town (South Africa) Casablanca (Morocco)

Doha (Qatar)

Düsseldorf (Germany)

Cascais (Portugal)

Head Office: +44 7480 775 526 | 0 7401 177 335

Copenhagen (Denmark)

Email: training@blackbird-training.com Website: www.blackbird-training.com



Dubai (UAE)



Blackbird Training Category



Human Resources



Audit & Quality Assurance



Finance, Accounting, Budgeting



Marketing, Sales, Customer Service



Secretary & Admin



Law and Contract Management



Project Management



IT & IT Engineering



Supply Chain & Logistics



Management & Leadership



Professional Skills



Oil & Gas Engineering



Health & Safety



Telecom Engineering



Hospital Management



Customs & Safety



Aviation



C-Suite Training



Agile and Refinement



Head Office: +44 7480 775 526 | 0 7401 177 335 Email: training@blackbird-training.com

Website: www.blackbird-training.com



Blackbird training Clients



MANNAI Trading Company WLL,



Alumina Corporation **Guinea**



Netherlands



Oxfam GB International Organization, Yemen



Capital Markets Authority, Kuwait



Nigeria





Oatar Foundation, **Qatar**



AFRICAN UNION ADVISORY BOARD ON CORRUPTION, Tanzania



Kuwait



Reserve Bank of Malawi, **Malawi**



Central Bank of Nigeria
Nigeria



Ministry of Interior, KSA



Mabruk Oil Company **Libya**



Saudi Electricity Company,



BADAN PENGELOLA KEUANGAN Haji, Indonesia



NATO **Italy**



ENI CORPORATE UNIVERSITY, Italy



Kuwait



General Organization for Social Insurance KSA



Defence Space Administration **Nigeria**



National Industries Group (Holding), Kuwait



Hamad Medical Corporation, **Qatar**



USAID **Pakistan**



STC Solutions, KSA



North Oil company,



EKO Electricity



Oman Broadband



UN.



Head Office: +44 7480 775 526 | 0 7401 177 335

Email: training@blackbird-training.com Website: www.blackbird-training.com





LONDON TRAINING PROVIDER

