

RAILWAYS & METRO RAIL BEHAVIOR BASED SAFETY TRAINING (BBS)



Course introduction:

In today's world, we need to look at new approaches to safety and health at our workplaces. We need to apply the lessons learnt from the past, through analysis of accidents and ill health because this will contribute to future prevention strategies and activities. Behavior Based Safety (BBS) is an approach that we believe can be applied successful and it's gaining more interest across industry sectors global

Course objectives

- · To emphasis the importance of BBS.
- · Understand the theory of accident.
- · To analyse the requirements that is applicable to health and safety.
- · Understand the BBS process.
- · BBS implementation.

Course contents:

BBS Concepts

- · An introduction to BBS .
- · BBS is OHSAS compliance.
- · BBS triangle.
- · What BBS training does.
- · BBS basics.
- · BBS and OHS culture.
- **BBS Processes**
- · Observation and feedback process.
- · What does a BBS observer gain from actively caring.
- · Some problems in observing and giving feedback.
- Reasons BBS observer may fail in observation and feedback process.
- · BBS observer requires interpersonal skills.
- · Observers' test of excellence.
- · Observers' five Ps behaviours.

BBS Processes contd...

- · Concept of an active observer.
- Quotes by excited observers.
 - **BBS** Implementation
- · Roadmap to Implement BBS at workplace.
- · BBS implementation and steering committee.
- · Problems in implementing BBS in the organization.
- What action plan is desirable in launching BBS.
- · Tasks of BBS steering teams.

ABC Model

The factors that affect the Behaviour

Effectiveness of BBS

Behaviour Observation Sheet

Case Studies

Exercises

Target group:

Company employees, safety committees, corporate managers, department managers, first line supervisors, safety officers, safety stewards and accident investigation team members.

AIRSC ACADEMY OF SAFETY AND DISASTER MANAGEMENT

AN UNIT OF: ALL INDIA RAIL SAFETY COUNCIL



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RAILWAYS & METRO RAIL FUNCTIONAL SAFETY TRAINING



Training: Functional Safety in accordance with EN 5012x

Certification: FSCP Level-1 Functional Safety Engineer in accordance with EN 5012x

Course introduction:

This course has the objective of training participants in the basic principles of Functional Safety and advancing their expertise in the rail-related technical standards of Functional Safety

Our training course modules introduce you to the processes necessary for your role in the safety life cycle. You are familiarised with the individual topics with the help of practical examples. All training course modules adopt a situation-based approach to the role of supporting processes and the resulting deliverables. Explanations of the necessary work products and appropriate treatment of safety plans are naturally an integral part of all modules.

- EN 50126 (IEC 62278) RAMS(Reliability, Availability, Maintainability and Safety
- EN 50129 (IEC 62425) Railway Applications : Safety related to electronic system for Signaling
- EN 50128 (IEC 62279) Railway Application: Software for Control and Protection System

Based on years of practical experience in the field of Functional Safety and participation in relevant standardization committees we impart you with the required knowledge relating to the existing EN 5012X standard standard for safety-relevant electrical / electronic systems. The first three days are classroom setting instruction that provide detailed information and example / discussion for understanding and mastering the requirements of EN 5012X functional safety

Course contents:

EN 50126 (IEC 62278) - RAMS

- Overview: European directives, understanding standardization, standards in the railway signaling technology
- Definitions
- Elements of RAMS and affecting factors
- Risk / Risk Analysis
- Safety Integrity
- Life Cycle Model

EN 50129 (IEC 62425) – System Safety -Hardware

- Definitions and scope
- Quality management requirements
- Safety management requirements
- Technical requirements
- The safety demonstration and the safety case (reports)
- Evaluation methods (FMEA, FTA, Markov models)

EN 50128 Development & Testing of Safety-Relevant Software

- Definitions
- Software safety requirement levels (SSAS)
- Personnel and responsibilities
- Life Cycle Model
- Use of COTS software
- Requirements of the lifecycle phases
- Verification / Validation

Techniques / measures

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RAILWAYS & METRO RAIL INDUSTRIAL SAFETY TRAINING



Course introduction:

Companies that consider Occupational Health and Safety at work as important as providing quality products usually have managers and departments responsible for these issues. They are called Environmental, Health and Safety (EHS) departments, also SHE or HS departments.

EHS Management has two general objectives:

- 1. Prevention of incidents or accidents and ill health that might result from abnormal operating conditions on the one hand and
- 2. Reduction of adverse effects that result from normal operating conditions on the other hand.

Course objectives

- · To emphasis the importance of safety in industry.
- · Understand the requirements and industry practices.
- · Safety in handling and storage.
- · Understand the color and use of signanges.
- · Able to design relaible plant. Training Methodology:
- · Tutor led sessions.
- · Practical demonstration & Pre & post test for participants

Course contents:

Session 1: Introduction

- · What is safety?
- · Why safety is required?
- · Importance of safety.

Session 2: Chemical Safety

· Safe handling, storage, selection and standards of PPE's, chemical spillages.

Session 3: Mechanical Safety

- · Machine guarding.
- · Hand tool safety.

Session 4: General Safety Overview

- · What is colour coding?
- · What is incident reporting?
- · What is accident reporting?
- · What are unsafe act / condition?
- · What is ladder safety?
- · Personnel hygiene.

Session 5: Personal Protective Equipments (PPEs)

- · Types of PPEs.
- · Selection of PPEs.
- · Importance of PPEs.
- · Use & maintenance of PPEs.
- · Disposal of PPEs.

Session 6: Work Permit

- · What is work permit?
- · Role & responsibility of issuer and holder.
- · Importance, use & why it is required?

Session 7: Housekeeping

- · What is housekeeping?
- · Importance and role of housekeeping in safety.

Session 8: Fire Safety & General Safety guidelines

Target group: Supervisors, Facilities staff, Fire safety team members, Health and safety committee members, Workers who need to have a basic awareness on industrial safety, anyone who wishes to learn and implement safety in the workplace and deal with it effectively. Issue of certificate:

AIRSC and TÜV SÜD South Asia's certificate of attendance will be awarded to the candidates who attend intact training.

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