

COURSE: ROOT CAUSES ANALYSIS TRAINING

SCOPE AND APPLICABILITY:

Promote theoretical and practical training that allows participants to initiate an investigation of incidents in a structured way, identifying root causes through effective and recognized techniques. The participant will learn to use the most appropriate investigative tools, as per the specific incident, collect and evaluate evidence, identify root causes, assess trends, identify chronic areas and structure a report of recommendations.

REGULATIONS & STANDARDS

- NR-01 - General Provisions and Management of Occupational Risks;
- IEC 62740 – Root Causes Analysis;
- IEC 61025 – Fault tree analysis (FTA);
- ISO/IEC 31010:2009, Risk management – Risk assessment techniques;
- ISO 31000: 2009, Risk management – Principles and guidelines.

COURSE CONTENT:

1. Introduction
 - a. What is root causes analysis?
 - b. Objectives e Benefits;
 - c. Basic Principles;
 - d. PDCA Cycle.
 2. Definition of the Problem
 - a. Stages;
 - b. Initiation;
 - c. Establishing the facts;
 - d. Analysis;
 - e. Analysis team;
 - f. Analysis of changes/events.
 3. Analysis Tool Selection
 - a. Definition of Process Safety;
 - b. Process Safety;
 - c. Risk Based Process Safety (RBPS);
 4. Root Causes Analysis Execution
 - a. Process Accidents;
 - b. Process Accidents Investigation;
 - c. Root Causes Map;
 - d. Root Causes Elimination;
 - e. Work Accident Investigation and Analysis Report;
 - f. Conclusions;
 - g. Practical Exercises;
 - h. Proposed Exercises.
- d. FMEA;
 - e. 5 Why's;
 - f. Kaizen;
 - g. Kaizen Blitz;
 - h. Ishikawa Diagram;
 - i. Fault Tree Analysis.

COURSE DESIGN:

TOTAL: 16 hours.

PREREQUISITE(S):

None.

MINIMUM/MAXIMUM NUMBER OF DELEGATES

This course requires a minimum of 1, and a maximum number of 12 trainees.

To offshore trainings, the course number of attendees will comply with the vessels/rig necessity.

MAIN SAFETY ISSUES:

- Focus on the root of the problem, not just the consequence that was/could be caused;
- Full attention to the different possible causes that triggered the accident, not focusing on just one cause;
- Try to involve as many capable employees as possible in the root cause analysis.

CERTIFICATION:

Training certificate signed by responsible Engineer accredited by Brazilian CREA.



Root Causes Analysis

CERTIFICATE VALIDITY PERIOD:

Recommendable: 2 years.