2018美国安全培训团

2018USA Safety Camp

全安工匠室

全心协力 安全传递

深圳全安管理咨询有限公司

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2018美国安全培训团简介

Introduction of 2018 USA Safety Camp

时间 Time: **2018年9月** 2018.9

地点 Location: **美国休斯敦市** Houston Texas USA

名额 Students: **30名学员** 30 Students

培训期 Duration: **15天** 15 days

培训师 Trainers: **美国安全知名培训师及经验丰富的安全专家**

费用 Cost: **97,500人民币（包北京至休斯敦机票，吃住，培训费用, 交通）**

（ include flight from Beijing to Houston, R&B, training, and transportation **）**

举办方 Host: **深圳全安管理咨询有限公司** Safety2share Inc.

语言 Language : **中文翻译全程陪同，授课翻译**

其他 Others: **免费提供所有ppt课件及培训证书**

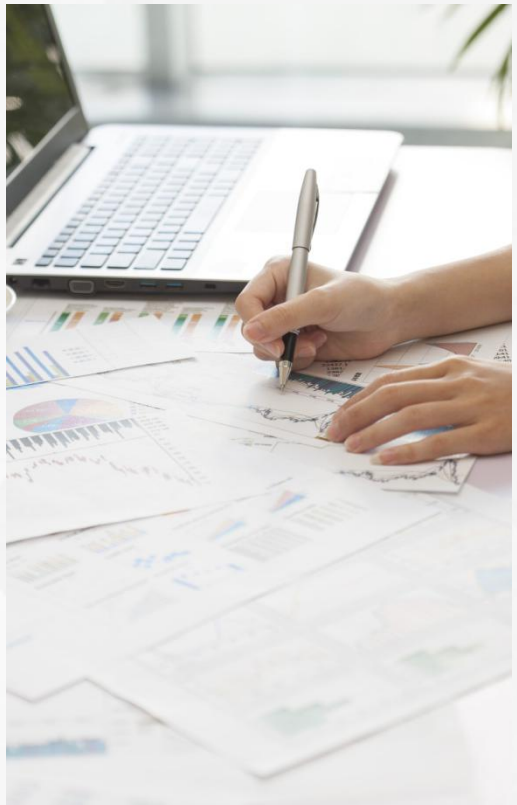
课程主题
Main Training Topics

- **OSHA法律法规（三天）** OSHA General Industry Laws（3 days）
- **PSM工艺安全管理（四天）** Process Safety Management（4 days）
- **Roundtable安全圆桌经验分享会（一天）** Roundtable safety talks and shares（1 day）
- **Facilities visit美国公司参观与交流（三天）** US Facilities visit（3 days）
- **SMS安全管理体系（半天）** Safety Management System（half day）
- **Maturity grid安全成熟过程矩阵分析（半天）** Maturity Grid Analysis（half day）

OSHA
法律法规

- **This course covers OSHA Standards, policies, and procedures in general industry. Topics include**
  - scope and application of the OSHA General Industry Standards,
  - general industry principles and special emphasis on those areas in general industry which are most hazardous.

- **Upon course completion students will have the ability to define general industry terms found in the OSHA General Industry Standards, identify hazards which occur in general industry, locate and determine appropriate OSHA General Industry Standards, policies, and procedures, and describe the use of OSHA General Industry Standards and regulations to supplement an ongoing safety and health program.**



OSHA
法律法规

- **此课程涵盖了OSHA标准、政策和普遍行业流程。主题包括 ：**
  - OSHA行业标准的适用范围；
  - 普遍行业方针和针对行业内高危领域的特别强调。

- **当课程结束时，学员将可解释在OSHA行业标准中出现的行业术语，明确行业隐患，找到并确定相应的OSHA行业标准、政策和流程，并描述如何使OSHA行业标准持续地附加于安全和健康计划中。**

OSHA
法律法规

- Introduction to OSHA
- Hazard identification and assessment
- Recordkeeping
- Working/walking surfaces
- Egress
- Personal protective equipment
- Confined spaces
- Fire protection
- Materials handling

- **OSHA介绍**
- **隐患辨识和分析**
- **记录**
- **工作/行走表面**
- **出口**
- **个人防护用品**
- **密闭空间**
- **火灾防范**
- **材料搬运**

OSHA
法律法规

- Machine guarding
- Electrical
- Construction standards
- Housekeeping
- Lockout/Tagout
- Hazardous material
- Welding and cutting
- Audits and inspections
- Individual Key Performance Indicators （KPI） Goals and Incentives

- **机械防护**
- **建筑标准**
- **保洁**
- **上牌/挂锁**
- **危险品**
- **焊接和切割**
- **审计和检察**
- **个人业绩指标的目标和奖励**

PSM
工艺安全管理

- Process safety is focused on preventing catastrophic incidents（fires, explosions, toxic releases）form loss of containment of hazardous materials, This is accomplished by applying engineering and management skills to the design, construction, operation and maintenance of processes.
  - **Introduction to Process Safety**
    - The process safety introduction provides information that is used as a basis for the needs of a comprehensive process safety system.
      - Definitions
      - History of incidents that influence process safety
      - Business case for process safety

PSM
工艺安全管理

- **工艺安全的重点是防止由于危险品隔离失效而造成的灾难性事故（火灾、爆炸、有毒物质泄漏），这是通过将工程和管理技能应用于工艺的设计、建造、操作和维护来实现的。**
  - 工艺安全的介绍
    - 工艺安全的介绍提供了全面的工艺安全系统所需要的基础。
    - 定义
    - 影响工艺安全的事故回顾
    - 工艺安全的商业案例

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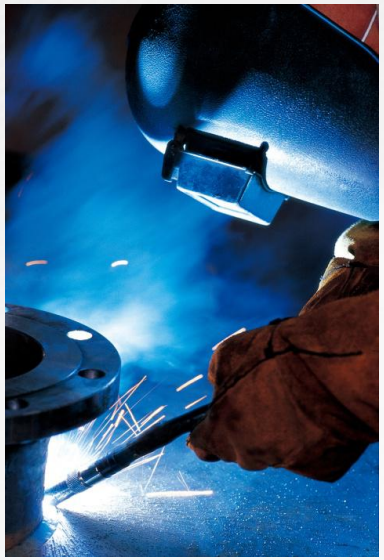
PSM
工艺安全管理

– Compliance



- There are US and International requirements that require companies to comply with standards.
  - Compliance requirements will be presented for the following elements:
  - US agencies（OSHA, EPA and BSEE）standards and regulations that regulate process safety
  - Process safety National Emphasis Programs
  - International standards
  - Trade organizations

PSM
工艺安全管理

- **合规**
  - **美国和国际上都有要求，需要各公司遵守标准。**
    - **在以下几个方面介绍相关的合规要求：**
      - 美国机构（OSHA，EPA和BSEE）关于工艺安全的要求和法规
      - 工艺安全国家重点项目
      - 国际标准
      - 行业组织

PSM
工艺安全管理

- **Leadership**
  - An organizations leadership and entire work group must be committed before the process safety system can be successful and sustainable.
    - Leadership roles and responsibilities
    - Culture
    - Communications and promotion
    - Employee participation
    - Critical indicators

PSM
工艺安全管理

- **领导力**
  - **在实现工艺安全的成功和持续成功之前，领导和所有员工必须对安全做出承诺。**
    - 领导职能和职责
    - 文化
    - 沟通和激励
    - 员工参与
    - 关键指标

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PSM
工艺安全管理

– Hazards and Risks

- Identifying process hazards and their associated risks is the basis for developing the process safety plan.
  - Layers of protection
  - Risk matrix
  - Hazard and risk assessments
  - Inherently Safer Design（ISD）

PSM
工艺安全管理

- **隐患和风险**
  - **辨识工艺隐患及其相关风险是制定工艺安全计划的基础。**
    - 保护层
    - 风险矩阵
    - 隐患和风险分析
    - 本质安全设计（ISD）

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PSM
工艺安全管理

– Analysis

- Process analysis provides for identification of hazards and their risk before they occur so they can be mitigated or controlled.
  - PHA methods（WIA, FTA, FMEA, BowTie, LOPA）
  - HAZOP
  - Trade secrets

PSM
工艺安全管理

- **分析**
  - **工艺分析提供了在隐患和风险发生之前对其的辨识，这样隐患和风险可以被消除或控制。**
    - 工艺危害分析（WIA,FTA, FMEA, BowTie, LOPA）
    - 危险与可操作性分析（HAZOP）
    - 行业秘密

PSM
工艺安全管理

– Competency

- A trained and skilled management team with competent employees is a key element.
  - – Procedures
  - – Training
  - – Certification
  - – Audit for competency
  - – Competency metrics
  - – Case study
  - – Learning Management System

PSM
工艺安全管理

- **能力**
  - **一个训练有素的管理团队和有能力的员工是关键。**
    - 流程
    - 培训
    - 资质
    - 能力审核
    - 能力矩阵
    - 案例学习
    - 培训管理系统

PSM
工艺安全管理

– Control

- Discuss the elements that are used to control the process safety activities.
  - Principles of process safety control elements
  - Action tracking
  - Contractors
  - MOC/PSSR
  - Permits
  - MI
  - Emergency Planning/Response
  - Additional Control elements

PSM
工艺安全管理

- **控制**
  - **讨论控制工艺安全行为的元素。**
    - 工艺安全控制元素的基本方针
    - 动作追踪
    - 承包商
    - MOC/PSSR
    - 工作许可证
    - MI
    - 应急计划/响应
    - 附加的控制元素

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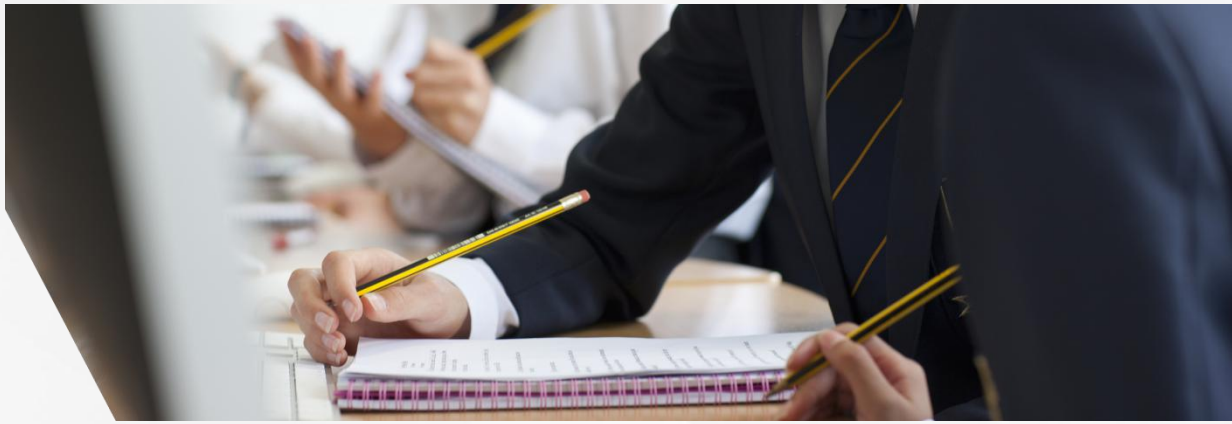
PSM
工艺安全管理

– Evaluation

- Evaluation of the process safety system provides critical information used to improve the processes.
  - Audits
  - Incident Investigations
  - Safety cases
  - Key Performance Indicators



PSM
工艺安全管理

- **评估**
  - **对于工艺安全系统的评估为优化工艺提供了至关重要的信息。**
    - 审计
    - 事故调查
    - 安全状况报告
    - 关键业绩指标

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PSM
工艺安全管理

– Resources

- Overview of PSM, RMP and SEMS II Regulations
- DOE Audit Checklist

– 资源

- PSM, RMP和SEMS II 法规的概述
- DOE审计清单

Roundtable
安全圆桌经验分享会

- A face-to-face session with some Safety leaders + Safety Professionals from Fortune 500 companies to share and discuss experiences and knowledge on safety practices
  与世界500强企业的安全管理人员、安全专业人员，面对面地交流和探讨关于安全实践的经验和知识

- What an opportunity to learn as well as to share with the leaders from the world class companies
  与世界一流企业的领导者学习和探讨

- Get your hard safety questions to be discussed and answered
  讨论并解答你关于安全的疑问

Facilities visit
美国公司参观与交流

- It is a great opportunity to each participant to see and feel on how safety knowledge is transformed into real world day to day operations – shop floor!

  对于每一位参与者来说，这都是一个不可多得的机会，可以亲眼看见并感受安全知识是如何每天在现实世界中运用的！

- An interact opportunity to discuss some very safety issue you may have with facilities management staff also with workers

  你将有机会与设施管理人员或者工人，面对面地交流安全问题。

SMS
安全管理体系

- There are multiple types of Safety Management Systems defined by federal/state regulations, independent organizations, company/site requirements or with various components of each of these. This session will contain descriptions of each of these, their advantages and limitations and selection of the appropriate SMS for various types of organizations.

- The Element-based Safety Management System （ESMS）will be introduced and the attendees will select the elements from the ESMS master list. The goal is to provide a more precise selection of elements that match the requirements of the organization instead of having the organization match the requirements of an externally defined list of elements.

- Each attendee or group of attendees from a single organization will identify elements that will serve as a foundation for building a comprehensive personnel and process safety management system.

SMS
安全管理体系

- 联邦/州的条例、独立机构、公司/工作场所的规定等，对于安全管理体系有各式各样的定义。这一个章节会对各种不同的安全管理体系及其优点和不足做一个说明，以及如何针对不同类型的机构选择适合的安全管理体系。

- 介绍ESMS，并让学员从ESMS清单中选择元素，其目的在于为满足机构需要更准确地选择元素，而不是让机构来满足外界定义的元素。

- 每一位或同一个公司的一组学员，需要辨识出为打造一个全面的人员和工艺安全管理体系的基础元素。

Maturity grid
安全成熟过程矩阵分析

- While companies focus on specific details of their safety processes the need for a higher level look at their programs can be performed to provide a longer range view of their status. Leadership can evaluate their organizations present status so they can identify and understand the next levels, management can develop improvement plans.

- A method based on the Safety Maturity Grid is used to evaluate the level of maturity of an organization. The grid is divided into 5 stages（Uncertainty, Awakening, Enlightenment, Wisdom, Certainty） and is a gauge to identify an organizations level of maturity for their safety processes.

- After and introduction to the Safety Management System, the attendees will use the Safety Maturity Grid to evaluate their organizations. After determination of their maturity level a plan to advance to the next stage will be developed.

Maturity grid
安全成熟过程矩阵分析

- 当各个公司关注安全公司细节的同时，在一个高一些的层次来看待整个程序可以为其状态提供一个更长远的视角。管理层可以评估公司的现状、识别和理解下一个阶段，进而制定优化方案。
- 一个基于安全成熟过程矩阵的方法可以用来评估公司的成熟度水平。这个矩阵分为5个阶段（不明确，觉醒中，启蒙中，明智，明确），用以评估公司安全工艺的成熟度水平。
- 在介绍完安全管理体系后，学员会使用安全成熟度矩阵去评估各自的公司，在评估完后会根据各自的评估结果来制定优化方案。

谢谢聆听

Thank you!