Global Horizon
TRAINING CENTER

Training Course:
Kiln Mechanism: Operation, Maintenance, and Optimization

17 - 21 January 2027
Sharm El-Sheikh (Egypt)
Sheraton Sharm Hotel

Training Course:
Kiln Mechanism: Operation, Maintenance, and Optimization

Training Course code: EN1930 From: 17 - 21 January 2027 Venue: Sharm El-Sheikh (Egypt) - Sheraton Sharm Hotel
Training Course Fees: 5100 Euro

Introduction

Kilns are critical components in industries such as cement, lime, and metallurgy, where controlled high-temperature processing is essential for product quality and efficiency. Understanding kiln mechanisms, including thermal behavior, mechanical systems, and process control, is vital to ensure reliable operation and minimize downtime.

This program, designed by Global Horizon Training Center, equips participants with the technical knowledge and practical skills required to operate, maintain, and optimize kiln systems for improved performance and longevity.

Course Objectives

By the end of this program, participants will be able to:

- Understand the working principles and components of kiln systems
- Analyze thermal and mechanical behavior of kilns
- Identify common operational issues and failure modes
- Apply best practices in kiln operation and process control
- Perform maintenance and troubleshooting of kiln components
- Optimize kiln performance and energy efficiency
- Ensure safety and compliance in kiln operations
- Improve reliability and extend equipment life

Target Audience

This program is designed for:

- Mechanical and Process Engineers
- Maintenance and Reliability Engineers
- Plant Operators and Supervisors
- Cement, Lime, and Metallurgical Industry Professionals
- Technical Staff involved in kiln operation and maintenance
- Production and Operations Managers

Outline

Day 1: Fundamentals of Kiln Systems

- Overview of kiln types rotary, shaft, tunnel
- Components and mechanical structure of kilns
- Process flow and material movement
- Thermal zones and heat transfer principles
- Introduction to kiln operation

Day 2: Thermal and Process Control

- Combustion systems and fuel types
- Temperature control and monitoring
- Process parameters and optimization
- Airflow and draft control
- Emission control considerations

Day 3: Mechanical Systems and Maintenance

- Kiln drive systems and alignment
- Bearings, rollers, and support systems
- Refractory lining and insulation
- Maintenance strategies and inspection
- Troubleshooting mechanical issues

Day 4: Operational Challenges and Troubleshooting

- Common kiln problems ring formation, coating, blockages
- Diagnosing process and mechanical faults
- Corrective actions and preventive measures
- Process stability and efficiency improvement
- Safety considerations in operation

Day 5: Optimization, Reliability, and Case Studies

- Energy efficiency and fuel optimization
- Performance monitoring and KPIs
- Reliability-centered maintenance RCM
- Continuous improvement strategies
- Case studies and real-world applications

Registration form on the Training Course: Kiln Mechanism: Operation, Maintenance, and Optimization

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
Telephone / Mobile: .....
Personal E-Mail: .....
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Company Information

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Address: .....
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Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
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Personal E-Mail: .....
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Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
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Easy Ways To Register

Telephone: +201095004484 to provisionally reserve your place.	Fax your completed registration form to: +20233379764	E-mail to us : info@gh4t.com or training@gh4t.com	Complete & return the booking form with cheque to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt.