



*Training Course:  
Heat Rate Optimization*

*23 - 27 March 2025*

*Cairo (Egypt)*

*Holiday Inn & Suites Cairo Maadi, an IHG Hotel*

## Training Course: Heat Rate Optimization

Training Course code: SC235211 From: 23 - 27 March 2025 Venue: Cairo (Egypt) - Holiday Inn & Suites Cairo Maadi, an IHG Hotel Training Course Fees: 3575 € Euro

### Introduction:

The Heat Rate Optimization training program is designed to equip participants with the knowledge and skills necessary to improve the thermal efficiency and overall performance of power plants, industrial facilities, and processes. This program is intended for professionals working in energy production, facility management, and those seeking to enhance their understanding of heat rate optimization.

### Target Audience:

This training program is suitable for:

- Power plant engineers and operators
- Energy and utilities professionals
- Facility managers and engineers
- Maintenance and reliability personnel
- Anyone interested in optimizing energy efficiency and reducing operational costs

### Objectives:

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

- Understand the concept of heat rate and its importance in energy efficiency.
- Identify key factors affecting heat rate in various processes and systems.
- Implement strategies and best practices to optimize heat rate.
- Enhance energy efficiency, reduce fuel consumption, and minimize environmental impact.
- Apply performance monitoring and analysis techniques to assess heat rate improvements.

### Outlines:

Day 1: Introduction to Heat Rate and Energy Efficiency 5 hours

- Overview of energy efficiency in industrial processes

- Understanding heat rate and its significance
- Factors affecting heat rate in power generation and industrial processes
- Basics of energy balance and efficiency calculations

#### Day 2: Boiler Efficiency and Heat Rate Optimization 5 hours

- Boiler types and their efficiency characteristics
- Boiler operation and maintenance best practices
- Strategies for optimizing boiler heat rate
- Case studies on boiler efficiency improvements

#### Day 3: Steam Turbine and Generator Efficiency 5 hours

- Steam turbine fundamentals and performance considerations
- Generator efficiency and maintenance
- Turbine and generator control systems
- Heat rate optimization in combined-cycle power plants

#### Day 4: Cooling Systems and Heat Exchangers Efficiency 5 hours

- Cooling system types and their energy efficiency
- Heat exchanger design and performance
- Cooling water treatment and fouling prevention
- Energy-efficient cooling system operation

#### Day 5: Performance Monitoring and Future Trends 5 hours

- Performance monitoring and data analysis techniques
- Continuous improvement in heat rate optimization
- Emerging technologies and trends in energy efficiency
- Course review, Q&A, and certification

## Registration form on the Training Course: Heat Rate 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: .....

Official E-Mail: .....

### Company Information

Company Name: .....

Address: .....

City / Country: .....

### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....

Position: .....

Telephone / Mobile: .....

Personal E-Mail: .....

Official E-Mail: .....

### 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  
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