Global Horizon
TRAINING CENTER

# *Training Course:*
# *Heat Recovery Steam Generator Combined Cycle Power Water*

*30 June - 4 July 2025*
*London (UK)*
*Landmark Office Space - Oxford Street*

# Training Course:
# Heat Recovery Steam Generator Combined Cycle Power Water

Training Course code: SC235633 From: 30 June - 4 July 2025 Venue: London (UK) - Landmark Office Space - Oxford Street Training Course Fees: 5775  Euro

## Introduction

This training program provides an in-depth understanding of Heat Recovery Steam Generators HRSG and combined cycle power plants, with a specific focus on water management and recovery processes. Developed by Global Horizon Training Center, this course equips participants with technical knowledge and practical skills necessary for optimizing HRSG systems to maximize efficiency and sustainability.

## Objectives

Upon completion of this program, participants will:

- Understand the principles and functions of HRSG systems in combined cycle power plants.
- Gain insights into water recovery and treatment processes specific to combined cycle applications.
- Learn to optimize HRSG operations for efficiency and environmental compliance.
- Analyze the impact of water quality on equipment performance and longevity.
- Apply best practices in maintenance and troubleshooting of HRSG systems.

## Methodology

The program uses an interactive approach, combining lectures, case studies, group discussions, and practical exercises to ensure that participants can immediately apply their knowledge. Real-life scenarios will be examined to reinforce concepts and allow participants to address challenges commonly faced in HRSG systems.

## Organizational Impact

Organizations can expect the following outcomes from this program:

- Enhanced operational efficiency and reduced costs through optimized HRSG processes.
- Improved environmental performance and regulatory compliance.
- Reduced downtime due to improved maintenance practices.
- Enhanced workforce capability to manage and troubleshoot HRSG-related issues.
- Increased equipment lifespan and performance through better water quality management.

## Target Audience

This program is ideal for:

- Power plant engineers and technicians.
- Maintenance and operations personnel in combined cycle power plants.
- Water treatment specialists working in power generation.
- Environmental compliance officers.
- Anyone involved in the design, operation, or maintenance of HRSG and combined cycle systems.

## Outlines:

Day 1:

Fundamentals of HRSG and Combined Cycle Power Plants

- Overview of combined cycle power generation.
- Introduction to Heat Recovery Steam Generators.
- Key components and functions of HRSG systems.
- Basics of thermodynamics and heat transfer in HRSG.
- Water-steam cycle principles and its relevance in power generation.

Day 2:

Water Chemistry and Treatment in HRSG Systems

- Importance of water quality and treatment in HRSG.
- Types of impurities and their effects on the system.
- Techniques for water treatment and purification.
- Managing scaling, corrosion, and other water-related issues.
- Case study: Water chemistry challenges in HRSG systems.

Day 3:

Operational Optimization for HRSG Systems

- Key operational parameters and optimization techniques.
- Monitoring and controlling temperature, pressure, and flow.
- Energy recovery techniques to maximize efficiency.
- Reducing emissions and complying with environmental standards.
- Practical exercises: Monitoring and adjusting HRSG parameters.

Day 4:

Maintenance and Troubleshooting HRSG Components

- Routine and preventive maintenance practices.
- Common issues and failure modes in HRSG systems.
- Troubleshooting techniques for heat exchangers, economizers, and condensers.
- Safety protocols for maintenance activities.
- Group discussion: Troubleshooting real-world HRSG problems.

Day 5:

Advanced Topics and Future Trends

- Innovations in HRSG and combined cycle technology.
- Digitalization and remote monitoring systems for HRSG.
- Energy storage and integration with renewable energy sources.
- Case studies on successful HRSG projects.
- Wrap-up session: Review of key concepts and final Q&A.

# Registration form on the Training Course: Heat Recovery Steam Generator Combined Cycle Power Water

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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
- ☐ Please invoice my company

## Easy Ways To Register

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| 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. |