

**Learning Topic: Technical (Plant Processes & Operations).**

**Course Name: Process Heat Exchangers**

**Reference Code: PLOP 107**

### Course Overview:

This course is one of the basic training courses for any operation staff member.

A heat exchanger is a piece of equipment used to transfer heat from one fluid to another in plant processes. Heat exchangers are used to control the temperatures of process fluids and also to maximize the efficiency of processes by making use of heat energy that might otherwise be lost.

Heat exchangers handle many kinds of fluids. Heat exchangers also operate at extreme temperatures. Because of this, it is important to know how heat exchangers work, what fluids they are handling, and the operating temperatures of the equipment. The study of heat exchangers is important to help to operate and maintain equipment safely, regulate operating conditions for maximum efficiency and help control costs.

This basic course covers the main purpose of heat exchangers and how each major type of heat exchanger works. The basic steps of operation and routine preventive maintenance for heat exchangers will be described, as well as recognizing, recording, and regulating heat exchanger operating conditions.

### Course Objectives:

**Applying the concepts covered in this training course, delegates will be able to:**

1. Describe heat exchangers.
2. Describe the basic components of heat exchangers.
3. Describe the applications of heat exchangers.
4. Describe how to operate heat exchangers.
5. Describe how to maintain heat exchangers.

### Training Methodologies:

The training methodology is interactive and is suitable for all employees involved in maintenance and operations management enhancing the following:

- Pre-test and Post-test
- Variety of Learning Methods & examples
- Presentation
- Lectures
- Group Work

#### United Arab Emirates

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## Who should attend?

Operation engineers

Operations technicians

Operators

Maintenance technicians

Any interested plant personnel in stores, warehouse, safety, procurement, logistics...etc.

## Training Outline:

### Day 1:

Course Introduction & Lesson 1: About Heat Exchangers

### Day 2:

Lesson 2: Major Components of Heat Exchangers

### Day 3:

Lesson 3: Applications of Heat Exchangers

### Day 4:

Lesson 4: Operating Heat Exchangers

### Day 5:

Lesson 5: Maintaining Heat Exchangers & Course Conclusion

**Duration:** 5 Days

**Venue:**

**Numbers of hours:** 30 Hours

**Time:** 08:00 AM -02:00 PM

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