

**Course Overview:**

in this course you will gain an in-depth knowledge on furnace including the heat exchanger, coolers and ladle furnace treatment. Furnaces provide heat by transferring combustion products through a heat exchanger.

Furnaces pass air over the outside of the heat exchanger, transferring the heat from the fuel to the air.

**Course Objective:**

This course consists of five-day classes. The course is intended for operating personnel. Areas covered include basic heat transfer, fuel, refractory, principals of design applications and operation of different pipe steel heaters (furnaces), heat exchangers and coolers.

**Course Outline:**

- Furnace
- Refractoriness
- Technical Tools Of Relay Engineer Symmetrical Components
- Introduction And Classification Of Fuels
- Advantages Of Catalytic Cracking Over Thermal Cracking
- Thermal Cracking Reaction.
- Influence Of Various Parameters In Cracking
- Heat Transfer
- Factor Affecting Heat Transfer
- Types Of Exchangers
- Fired Heater (Furnace)
- Cooling Towers

**Who Should Attend:**

Supervisors, technicians, foremen, pourers and operators are in petrochemical plants.

**Training Language:**

EN / AR

**Training Methodology:**

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation