

Compressor Units Z TPU-03

Duration

Five days 25 Hours

Who should attend?

Engineers and senior engineers from chemical and industrial plants

Language

Arabic , English



Overview

The course covers theory and operation of compressors After introduction to the fundamentals (using a cbt-program) the focus of the course will be on compressor operation and control. Normal operation modes as well as start up and shut down procedures will be taught. Furthermore, troubleshooting of emergency and malfunction situations will be covered. In order to strengthen the theoretical knowledge a real time process simulator will be used for practicing plant operation skills in a simulated control room environment. As process example a typical recycle compressor system is simulated which is often used in oil refineries and petrochemical plants. The simulated compressor system consists of a centrifugal compressor driven by a steam turbine, lube and seal oil system.

Topics

- Introduction
- Purpose of Compression
- Applications
- Types of Compressors
- Centrifugal Compressors
- Casing
- Impeller
- Shaft and Seals
- Lube and Seal Oil System
- Steam Turbine / Speed Control and Governor
- Compressor Performance
- Performance Curves
- Surge Phenomenon
- Compressor Heating and Cooling
- Pre Start up Operation
- Start up Operation
- Shut down Operation
- Emergency Shut down Operation