

Compressors For Operators

General Objectives:

The aim of this subject is to familiarize participants with the most common types of compressors found in a process plant. Theoretical training on Positive Displacement compressors, Dynamic compressors and also Turbo Expanders. Its major parts, specific applications and operation of different types will be covered.

Specific Objectives:

At the end of training the trainees will be able to:

- ✓ State the main function of positive displacement compressors and dynamic compressors;
- ✓ Identify and label the key components of simple drawings of compressors;
- ✓ Describe the basic working principles of positive displacement compressors and dynamic compressors;
- ✓ Describe precautions to be taken when working with compressors;
- ✓ State the reasons why a compressor must be cleaned and prepared prior to maintenance activities commencing;
- ✓ Identify the main components of different types of compressors;
- ✓ Understand the concept applications wet and dry seals;
- ✓ Understand blow down requirement for wet seals;
- ✓ Describe the Operator's role and responsibilities when working with compressors;
- ✓ Develop troubleshooting skills;
- ✓ Develop cause & effect analysis.

Audience:

Engineers and operators from the technical and process department who want to improve knowledge in this area.

Workload: 40 hours

CONTENTS:

Module I – Basic Principles of Operation

Module II – Hazards associated with Compressors

Module III – Positive Displacement Compressors

Module IV – Dynamic Compressors

Module V – Turbo Expanders

Module VI – Auxiliaries

Module VII – Operator Duties

Module VIII – Start Up and Shut Down Procedures

Module IX – CCC Interpretation

Module X – Wet and Dry Seals

Module XI – Troubleshooting