

Gas Compressor Principles & Applications

Course Number

10300

Course Duration

5 days

Audience

Engineers, Performance Analysis Personnel, and Senior Technical Personnel

Prerequisites

The students should have completed a Solar Operation and Routine Maintenance Course, or have equivalent field experience.

Course Description

This course is designed to augment the Operation and Maintenance class by providing more advanced knowledge of the design, construction, operation, and performance of a boost compressor and its associated systems. This will provide the student with the knowledge to evaluate the operation of the compressor package, and enhance their ability to troubleshoot common problems on the seal, process valve, and surge control systems. Compressor performance theory and calculations are covered, which will allow the students to perform a basic performance evaluation.

Course Topics

1. General Compressor Package Description
2. Gas Properties
3. Compressor Performance Parameters
4. Compressor Performance Maps
5. Solar Compressor Aerodynamic Hardware
6. Surge in the Centrifugal Compressor
7. Solar Compressor Seal and Bearing Systems
8. Compressor Package Performance Analysis

Reference Material

Students receive a comprehensive student workbook and related technical references, such as Service Bulletins and Technical Letters.