



ENER 138- Rotary Compressor Concepts

.5 CREDITS

SYLLABUS

CATALOG DESCRIPTION

This course is designed to prepare maintenance and service technicians the knowledge to properly maintain and service rotary screw compressors. Students will gain theoretical and practical knowledge of the design and operation of the equipment through classroom studies and hands-on demonstrations.

Prerequisites: None

Semester Offered: All

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Identify the parts of a rotary compressor and their function.
2. Understand the process of natural compression in a rotary compressor.
3. Learn the terminology associated with rotary screw compressors.
4. Learn the uses of lubrication systems and volume ratio and capacity control devices.
5. Properly inspect a compressor for wear and defects.
6. Learn disassembly and re-assembly with hands-on practice.
7. Understand the operation of slide valves.
8. Perform Vi calculations of a rotary compressor.