



Equipment II Fans



Course Objectives

1. Describe the purpose, theory of operation, and function of a fan.
2. Describe the operation, components, and typical applications for each type of fan.
3. Identify typical auxiliary equipment associated with fans.
4. Describe common performance issues related to fans and their causes and indicators.



Key Terms (Define the following)

variable pitch controller - _____

stall - _____



Questions

1. What are the units of measurement for:
 - air flow volume - _____
 - fan speed - _____
2. List the types of axial fans.

3. What is the advantage of the vanes in a vane axial fan?

4. List three applications where centrifugal fans are preferred over axial.
 - 1) _____
 - 2) _____
 - 3) _____

5. Blowers are used in applications that require _____ volume and _____ pressure.
6. Mixed flow fans combine the features of _____ fans and _____ fans.
7. Describe the advantage of a crossflow fan.

8. List three ways to control the volume of air produced by a fan.
1) _____
2) _____
3) _____
9. Dampers and inlet vanes change air volume by adding or removing _____.
10. How is fan speed controlled?

11. What is the function of a variable pitch controller?

12. List five operation problems associated with fans.
1) _____
2) _____
3) _____
4) _____
5) _____