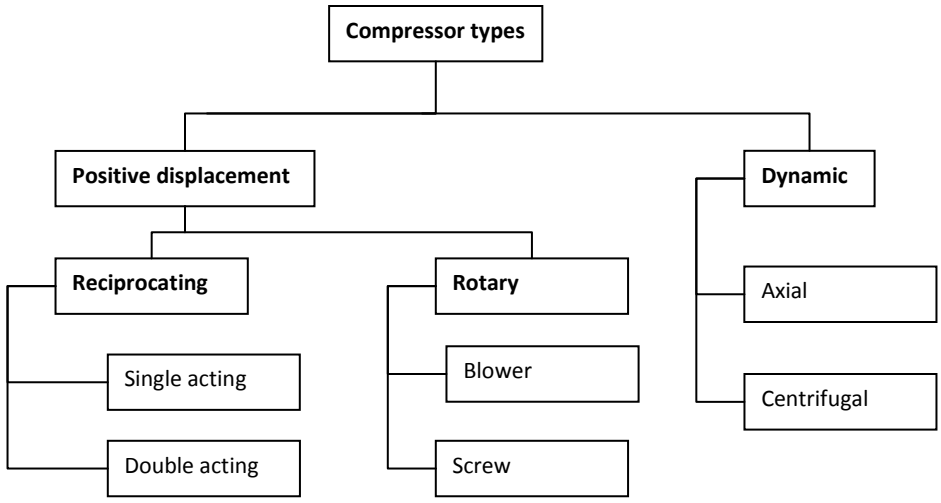
LECTURE 34

PRODUCTION OF COMPRESSED AIR

FREQUENTLY ASKED QUESTIONS

1. List four stages of compressed air preparation
Answer:
a) Air intake stage
b) Compressor stage
c) Conditioning stage
d) Compressed air distribution stage

2. Classify the compressor based on operating principle.
Answer
Depending on operating principle compressors can be classified as



3. Name three types of reciprocating air compressors that are commonly used in industry
Answer:
a) Reciprocating Piston air compressor
b) Rotary Screw type
c) Rotary Sliding vane type

4. Define compressor ratio for a compressor
Answer

$$\text{Compression ratio} = \frac{\text{Absolute discharge pressure of last stage}}{\text{Absolute intake pressure}}$$

5. Name two types of dynamics air compressors that are commonly used in industry

Answer:
a) Axial dynamic compressor
b) Radial dynamic compressor

6. What does staging mean?
Answer
Staging means dividing the total pressure increase among two ore more cylinders by feeding the exhaust from one cylinder into the inlet of the next cylinder. This improves the overall efficiency of compression in compressor.

7. What is multistage compression?
Answer:
Compressors having more than one cylinder are called multistage compressors. Staging means dividing the total pressure increase among two ore more cylinders by feeding the exhaust from one cylinder into the inlet of the next cylinder. This improves the overall efficiency of compression in compressor.

8. What are the advantages of multi stage compression
Answer:
Effective cooling can be implemented between stages
Reduces the power requirement
Increases the overall efficiency of the compressor