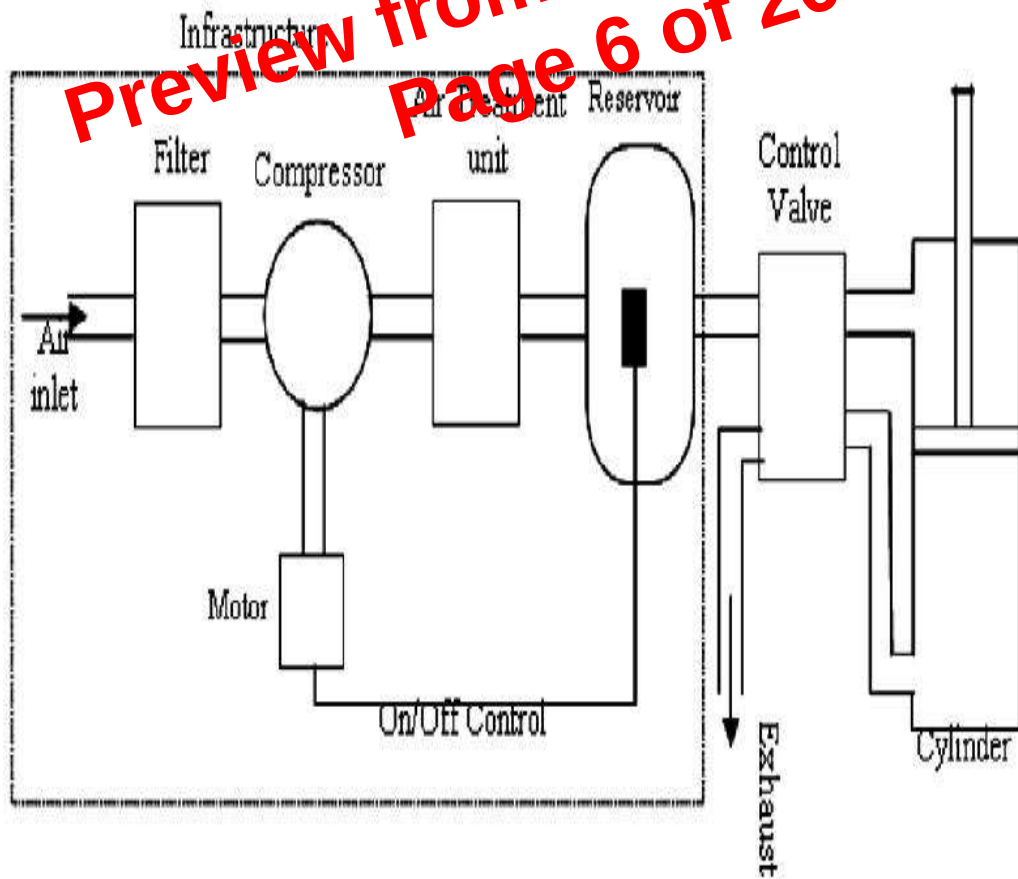


Basic block diagram of Pneumatics system



1. A Air tank to store a given volume of compressed air.
2. A compressor to compress the air that comes directly from the atmosphere.
3. An electric motor to drive the compressor.
4. Valves to control oil DIRECTION , PRESSURE AND FLOW RATE.
5. An actuator to convert the pressure of the oil into mechanical force or torque.
6. Pipes which carries the air from one location to another.

Advantages and disadvantages of Pneumatics system

- Advantages

1. Naturally available
2. Easy maintenance
3. Reduced frictional losses.
4. Less expensive system.
5. Less force is required due to lower inertia of air.

- Disadvantages

1. preparation of air is major problem.
2. Noise pollution
3. It is limited to lighter loads.

Force multiplication in fluid power systems

a. Power transmission

