Experiment No: 08
Experiment Name: Study on Compressor & its Function.

Theory:

Compressor:

Objectives:

1. To identify different parts of the machine.
2. To draw the diagram of the machine.
3. To observe function of different parts of the machine.
4. To run the machine and check different functional parameters of the machine.
5. To supply compressed air in PP spray gun.

Requirements:

Machine Specification:

Working Procedure:

1. Find the specification of compressor.
2. Observe different parts of the machine.
3. Draw a diagram of the machine by labeling different parts.
4. Observe functions of different parts of the machine.
5. Then run the machine.
6. Check different functional parameters of the machine.
7. Finally supply compressed air to PP spray gun and check the air flow form the compressor.

Diagram:

Machine Description:

Sl. No	Name of Parts	Description and Function
01		
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		
13		
14		

Working Principle of the Machine:

In an air compressor, there are two major parts - a compressing system and a power source. The compressing mechanism can be a piston, rotating impeller, or vane depending upon which type of compressor you are referring to. As for the power, it is supplied by an electric motor or other energy sources. The compressing mechanism, as the name suggests, helps in compressing atmospheric air by using energy from the power source.

The basic working principle of an air compressor is to compress atmospheric air, which is then used as per the requirements. In the process, atmospheric air is drawn in through an intake valve; more and more air is pulled inside a limited space mechanically by means of piston, impeller, or vane. Since the amount of pulled atmospheric air is increased in the receiver or storage tank, volume is reduced and pressure is raised automatically. In simpler terms, free or atmospheric air is compressed after reducing its volume and at the same time, increasing its pressure.

Conclusion and Comments: