Section- 6

Q1. Boiler mounting and Accessories:-

Boiler mounting:- Boiler mountings are the components generally mounted on the surface of the boiler to have safety during operation. There are the essential parts of the boiler, without which the boiler operation is not possible. The following are the important mountings of boiler:

* water level indicator
* Safety valve
* Pressure gauge
* steam stop valve
* main hole

1) water level indicator:- This device indicates the exact level of water in the boiler tube.

2) Safety valve:- It is a mechanical device used to safeguard the boiler, in case the pressure inside the boiler rises above its normal working atmosphere.

3) Pressure gauge:- The pressure gauge commonly used is the bourdon pressure gauge mounted on the front top of the boiler shell.

4) Steam stop valve:- the function of the steam stop valve is to stop or open the steam supply from the boiler to the point of application.

5) feed check valve:- A valve placed at the boiler end to regulate the flow of water.

⑥ main hole :- It is the opening provided of cleaning of inspection.

BOILER ACCESSORIES

There are those device which are installed with a boiler and its neighbouring area to increase the efficiency of the boiler. There are not the essential part of the boiler and thus without installing there device, the boiler operation can be accomplished though at a lower efficiency. The following are the important accessories of the boiler are :

1) Feed water Pump
2) Injector
3) Pressure reducing valve
4) Economiser
5) Air Pre heater
6) super heater
7) steam drier or separator
8) steam trap

*1) Feed water Pump :- the feed water Pump is used to feed water to the boiler.

2) Injector : Function of the injector is the same as the of feed Pump i.e to deliver feed water to boiler under Pressure.

3) Airpre-heater :- The function of the Pre-heater is to heat the air, before it enters the combustion chamber.

4) Super heater :- Super Pre-heater is used for stationary boiler. The function of the super heater is to convert

dry saturated steam into super heated at the desired temperature.