**Centrifugal Pump Start up Procedure:-**Pump is a device which is used to impart mechanical energy to liquids in order to transport them from one location to another. Essentially, pumps are devices which pressurize the liquid. They are run by motors; the shaft is connected to an impeller. It is the movement of the impeller which leads to the movement of the liquid.

Centrifugal Pump Start up Procedure

1. Ensure 1st the tag number of the pump to be commissioned is correct.
2. Ensure all pending maintenance jobs (if start after maintenance or PM)
3. Ensure all drain valve should be close.
4. Ensure Pump’s motor energized condition from electrical side.
5. Ensure all utilities lined up in pump seal cooling or lube oil if available.
6. Ensure that the discharge valve of the pump is closed. If it may be open or partially open, then close it.
7. Open the suction valve 100%.
8. Do pump priming by opening the vent valve and to release the air, when liquid starts oozing out of the vent then close the vent valve.
9. Rotate the shaft by hand to see if it is moving freely or not.
10. Check if the pump is rotating in the correct direction or not by starting the pump motor.
11. Check if the discharge pressure is steady or not. If it is not steady, then more trapped gases will need to be released.
12. Check all MCMS (machine conditioning & monitoring system) parameter are normal or under range.
13. Check if there are any undesired noises or vibrations from the pump. If there is then maintenance personals need to be called for fixing it.
14. Check if there is any leakage in the pump or not. If there is any leakage then maintenance personals needs to be called for fixing it.
15. Switch off the motor.
16. If everything is okay then the pump can be started by opening the discharge valve and then starting the motor or signalling the control room to start the motor.