1. **PURPOSE:**

To provide a procedure of operations of Rotary Cone Vacuum Drier in the Production of all active substances at Discovery.

1. **SCOPE:**

This procedure is applicable for all Rotary Cone Vacuum Driers operations used in the manufacturing process.

1. **RESPONSIBILITY:**

It is the responsibility of the person operating to follow this procedure as written in this SOP.

1. **Definitions:** Nil.
2. **PROCEDURE :**
   1. Check status of the Rotary cone vacuum drier from Equipment status. It should cleaned.
   2. Update the Equipment status.
   3. Check that discharge valve of the Rotary cone vacuum drier should be closed.
   4. Bring charging port of suitable position of charging of the material.
   5. Open the charging port of Rotary cone vacuum drier.
   6. Check visually, internal surfaces of the Rotary cone vacuum drier for cleanliness.
   7. Check the cleanliness of SS mesh of the dish fitter.
   8. Check the cyclone separator; it should be emptied by opening the valve.
   9. The cyclone separator valve should be closed.
   10. Charge the wet material with a clean SS-Scoop through the charging port.
   11. Close the charging port after placing the gasket at its proper place.
   12. Close the vacuum trap and condenser for condensate by opening the bottom valve.
   13. Start the vacuum pump and apply the vacuum.
   14. After getting the vacuum as per BPR Rotate the Rotary cone vacuum drier by pressing start push bottom.
   15. Check that no materials spills, while Rotary cone vacuum drier is in operation.
   16. In case the material spillage is observed stop the RCVD immediately and rectify fault
   17. Start the hot water circulation in the jacket of RCVD by switch on the hot water pump.
   18. Sample should be collected as per In process sampling SOP current version (PD-011).
   19. Continue the drying operation till the product till the product attains required content /Loss on drying as per BPR
   20. Switch “OFF” the hot water pump and vacuum pump.
   21. Stop the rotation of RCVD when it is in vertical position with discharge port at the bottom.
   22. Close the vacuum valve and release the vacuum.
   23. Place the container below the discharge valve as per BPR.
   24. Open the discharge valve and unload the material in to the container up to 3/4 th of the volume.
   25. Close the container with lid, seal it with the locking ring and put the respective tag.
   26. After unloading the total material from RCVD, Close the discharge valve.
   27. Verify that there is no material left in RCVD
3. **Formats / Annexure(S):** Nil
4. **Change History:**

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| **Revision No.** | **Effective Date** | **Details of Revision** | **Ref. CCF No.** |
| 00 | 01.01.2009 | New SOP is introduced | ---- |
| 01 | 01.06.2014 | Revised as per current SOP No system & more clear and clarity | ---- |
| 02 | 01.01.2017 | Procedure elaborated and SOPs PD-016, PD-022 and PD-026 are merged in this SOP. | PD-CRF-024/16 |
| 03 | 01.01.2018 | 1. SOP format changed make to inline with SOP-QA-001-05.  2. In Revision No 02 Change History typographical error was rectified | CCF/GEN/17035 |