STEPS OF A VERTICAL DECANTER CENTRIFUGE CYCLE:

1. FEEDING
2. DECANTATION
3. LIQUID DISCHARGE
4. SOLIDS DISCHARGE

2 PHASES: 1 SOLID 1 LIQUID

3 PHASES: 1 SOLID 2 LIQUIDS

Figure 3: Vertical decanter centrifuge cycle
1) **Feeding:** The slurry is introduced to the rotating solid bowl. Centrifugal force drives the solids to the bowl wall.

2) **Spinning:** The mother liquor is clarified and the solids are sedimented and compacted.

3) **Liquid Discharge:** The clarified mother liquor is discharged by either overflowing the bowl rim and / or with a tangential liquid skimmer. If there are two immiscible liquid phases, two liquid skimmers are used to discharge each clarified liquid phase.

4) **Solids Discharge:** The solids are removed manually from the solid bowl. If the solids are sufficiently fluid, they can be removed with a dedicated solids removal skimmer.