Maintenance of Centrifuges

Cleaning and maintenance

Cleaning should be done at regular intervals (weekly/monthly, depending on use) and right after any spill!

Switch off centrifuge and wipe centrifuge housing. If required, clean with mild detergents.

Remove buckets and rotor. For refrigerated centrifuges:
- Defrost the ice on the rotor chamber surface.
- Empty and clean the water collection tray.

Wipe rotor chamber and motor shaft. If needed, wipe with mild neutral detergent or use 70% alcohol for disinfection.

If needed, autoclave rotor, rotor lids and buckets at 121 °C, 20 min. (Steam use, EG beta, gamma radiation, or any high-energy radiation source.) Clean rotor, rotor lid, rotor seal, buckets, and adapters with damp lint free cloth and diluted detergents, alcohol, or alcohol containing detergents. Afterwards, wipe each with wet cloth and rinse thoroughly with distilled water. Use test tube brush with non-metallic tip to clean the rotor bores.

Leave centrifuge lid open overnight to let condensate evaporate.

Check rotor and buckets for corrosion. Take out of service if corroded or if any sign of damage is detected.

Place parts on dry cloth upside down to dry. To prevent aerosol-tight caps and seals from getting worn out/too fast to dry. To prevent aerosol-tight caps

Load symmetrically and balanced.

Fixed-angle rotors:
- Load symmetrically and balance weights.

Fasten rotor tightly
- Prior to centrifugation, rotor must be tightened securely on drive shaft using a rotor key.

Consider max. capacity
- Note the weight specifications printed on the rotor (e.g., 4 × 1.1 kg means weights of each bucket + adapter + tubes filled with sample must not exceed 1.1 kg). Take note of the maximum g-force specified for the tubes you are using.

Apply correct buckets
- Buckets with the same weight class must be on opposite positions. To check the weight class of the bucket, check the value on the side of the buckets.

Choose correct adapter
- Adapters must support tubes securely. The tube should fit tightly into the adapter.

Smart tips for centrifugation

For your safety:
- Automatic imbalance detection.

Lab requirements
- Select the centrifuge that suits your needs. e.g., bucket class, round bottom tube adapter, weight class.

Features/functions to use
- Make sure the «START» button is pressed instead of using RPM values. Use MAX RPM converter key of centrifuge.
- If required, set centrifuge to «MAX RPM» to spin at maximum speed or «MIN», to spin at minimum speed.
- If required, set centrifuge to «BCS», to initiate balance check to verify balance and to indicate balancing in error.
- If required, set centrifuge to «BCS-2000», to initiate balance check to verify balance and to indicate balancing in error.
- If required, set centrifuge to «ECONOMY» to set next run to «OFF» after 6–8 h of non-use to reduce energy consumption and extend system life.
- Use «SOCR» function for gentle acceleration and deceleration.
- Have an authorised service provider do a yearly service (OOI), and preventative maintenance (PM).

Note on maintenance:
- Monitoring rotor and buckets. (e.g., 4 × 1.1 kg means weights of each bucket + adapter + tubes filled with sample must not exceed 1.1 kg). Take note of the maximum g-force specified for the tubes you are using.

Features/functions to use
- Use to check balance: bucket class, round bottom tube adapter, weight class. Use «START» button to execute run.

Typical requirements
- Select the centrifuge that suits your needs. e.g., bucket class, round bottom tube adapter, weight class.

Special requirements
- Application of «BILATERAL» function is necessary for some applications, e.g., large volume, bacteria, viruses.

Note on maintenance:
- Monitoring rotor and buckets. (e.g., 4 × 1.1 kg means weights of each bucket + adapter + tubes filled with sample must not exceed 1.1 kg). Take note of the maximum g-force specified for the tubes you are using.
New: 4 liter capacity!