Maintenance of Centrifuges

Prevention is better than restoring. This poster does not replace the operating manual.

Cleaning and maintenance

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.

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

Note: UNPLUG centrifuge before using cleaning solutions.

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

Lubricate the threads of the fixed angle rotors after cleaning and autoclaving.

Lubricate bucket grooves, pivots and right after any spill!

Take a small amount of centrifuge lubricant onto your finger.

If needed, autoclave rotor, rotor lid and buckets at 121 °C, 20 min. (Sterilize use UV beta, gamma radiation, or any high-energy radiation source.)

Clean rotor, rotor lid, rubber seal, buckets, and adapters with damp lint free cloth and diluted detergents, alcohol, or alcohol containing detergents. Afterwards, rinse with wet cloth and rinse thoroughly with distilled water. Use test-tube brush with non-metallic tip to clean the rotor bores.

Place parts on a dry cloth upside down to dry. To prevent aerosol-tight caps and seals from getting worn out, store lids/caps separately from the bucket/rotor.

Load symmetrically and balanced.

Round bottom tube adapter ≠ flat base with rubber mat.

Load symmetrically and balance weights.

Smart tips for centrifugation

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

Wrong use of adapter ≠ secure support of upper part!

Round bottom tube adapter ≠ flat base with rubber mat.

For your safety:
Automatic imbalance detection.

Fasten rotor tightly
Prior to centrifugation, rotor must be tightly secured on drive shaft using a rotor key. For swing-bucket rotors, ensure that buckets are properly hooked into the rotor. Perform a manual earring out test to check that the buckets are moving freely.

Fixed-angle rotors:
Load symmetrically and balanced.

Load symmetrically and balance weights.

Consider max. capacity
Note the weight specifications printed on the rotor (g, kg). 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.

Choice for proper usage

Guide for proper usage

Lab requirements
- Advanced centrifugation systems or other centrifuges
- All centrifuges on an unobstructed surface
- Vertical centrifugation on a vibration-free table
- Level the centrifuge so sediment does not run off or rotor
- Ensure the centrifuge is used up to the maximum speed as stated in the manual
- When using high-speed centrifugal systems, do not use on the full load
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Features/functions to use
- Make sure the safety switch is activated before starting
- The Eppendorf Safe-Lock tube (if sample volume fits) and aerosol-retaining tips like the ep Dualfilter T.I.P.S.

Special requirements
- Be sure to open the rotor lid in a biosafety cabinet.
- Follow standard operating procedures for sample handling and containment.
- Use Eppendorf Safe-Lock tubes (if sample volume fits) and aerosol-retaining tips like the ep Dualfilter T.I.P.S.

Features/functions to use
- Make sure the safety switch is activated before starting
- The Eppendorf Safe-Lock tube (if sample volume fits) and aerosol-retaining tips like the ep Dualfilter T.I.P.S.

Have an authorised service provider do a yearly preventative maintenance program to ensure safety and optimum performance of your centrifuge. Contact local Eppendorf organisation for details on installation, OQ, and preventative maintenance (PM) services.
New: 4 liter capacity!