

# **DO YOU WANT TO USE THE BECKMAN COULTER ALLEGRA 25R REFRIGERATED CENTRIFUGE?**

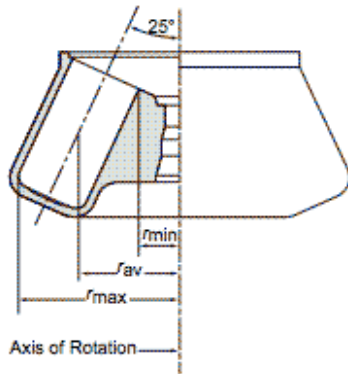


## **READ AND UNDERSTAND THESE INSTRUCTIONS FIRST**

1. Turn on the power using the white rocker switch on the back of the centrifuge.
2. If the centrifuge was shut down correctly by the previous user, the lid already should be open and the chamber should be clean. If not, the lid can be opened by pushing the “open door” button. If the chamber or rotor needs to be cleaned, please do so.
3. Verify that the rotor is securely attached to the pin by using the blue-handled wrench.

- Choose the appropriate yellow plastic rotor inserts for your samples to adapt them to the TA-10-250 rotor (see specs below). There are inserts that can be used for 15 ml and 50 ml conical tubes, and with no insert in the rotor, 250 ml or 500 ml bottles can be inserted.

## TA-10-250 ROTOR SPECIFICATIONS



Maximum speed .....	10 000 rpm
Density rating at maximum speed .....	1.2 g/mL
Critical speed range* .....	600 to 800 rpm
Relative Centrifugal Field* at maximum speed	
At $r_{\max}$ (137 mm) .....	15 300 $\times$ g
At $r_{\text{av}}$ (86 mm) .....	9 620 $\times$ g
At $r_{\min}$ (35 mm) .....	3 920 $\times$ g
Conditions requiring speed reductions .....	see RUN SPEEDS
Maximum imbalance of opposing loads .....	10 grams
Number of tube cavities .....	6
Available bottles and tubes .....	see Table 1
Nominal tube dimensions .....	62 $\times$ 120 mm
Nominal tube capacity (largest tube) .....	250 mL
Nominal rotor capacity .....	1.5 L
Approximate acceleration time to maximum speed	
(fully loaded) .....	2 min
Approximate deceleration time from maximum speed	
(fully loaded) .....	2 min
Weight of fully loaded rotor .....	12.22 kg (26.95 lb)
Rotor material .....	aluminum

- Place samples in the rotor. MAKE SURE THAT SAMPLES ARE BALANCED WITHIN THE ROTOR!! FAILURE TO PROPERLY BALANCE THE CENTRIFUGE IS VERY DANGEROUS AND CAN DAMAGE THIS INSTRUMENT.
- Enter the desired centrifugation parameters as follows:
  - **G-force (RCF):** push the “RCF” button followed by the up or down arrows followed by the “ENTER” key
  - **Time:** push the “TIME” button followed by the up or down arrows followed by the “ENTER” key
  - **Temperature:** push the “TEMP” button followed by the up or down arrows followed by the “ENTER” key
  - **Rate of acceleration/deceleration:** Push the “ACCEL” or “DECEL” button followed by the up or down arrows followed by the “ENTER” key. A value of 0 indicates the slowest possible rate of acceleration or

deceleration to/from maximum speed, a value of 9 indicates the fastest possible rate of acceleration or deceleration.

- NOTE: THE MAXIMUM SPEED FOR THE TA-10-250 ROTOR IS 10,000 RPM.
7. Once the samples are situated within the rotor, close the chamber lid. When it engages it will be latched automatically by the centrifuge.
  8. To start the spin, press the "START" button.
  9. Remain with the centrifuge until it reaches the target spin speed.
  10. When the spin has finished and the rotor is done spinning, the chamber lid can be opened by pressing the "OPEN DOOR" button.
  11. When all spins have been completed, power off the centrifuge using the white rocker switch on the back of the machine and leave the chamber open so that it can air out.
  12. Inspect the rotor and centrifuge chamber. If you spilled any sample, clean and decontaminate (as necessary) the rotor and/or chamber. To remove the rotor from the centrifuge, use the blue-handled wrench. The rotor should be washed using soap and water and dried before re-securing it to the centrifuge.

If you have any questions about the operation of this instrument, please ask your research mentor or contact Dr. Liepman ([aliepman@emich.edu](mailto:aliepman@emich.edu))