



TD-4 Labotary Low Speed Centrifuge



1. Description

TD-4 low-speed centrifuge (hereinafter referred to as this machine) can be widely used in clinical medicine, biochemistry, immunology and other fields, and is a conventional equipment for centrifugal precipitation in the laboratory.

2. Main specifications and technical parameters

Maximum relative centrifugal force	2150g
Angle rotor	12 holes × 7ml / 6 holes × 15ml / 8 holes × 10ml
Motor	brushless motor
Timing range	0-99 minutes
Power	AC110-220V, 50-60Hz, 5A
Noise	55dBA
Dimensions	12" x 10" x 9" / 310 × 250 × 230mm
Weight	22lbs / 10kg



Rotor parameters

Rotor model	Maximum speed	Maximum capacity	Maximum centrifugal force
NO.1 angle rotor	4000r/min	12×10ml	2095×g
NO.2 angle rotor	4000r/min	12×20ml/15ml	2220×g
NO.3 angle rotor	4000r/min	18×10ml	2240×g
NO.4 horizontal rotor	4000r/min	8×15ml	2690×g
NO.5 horizontal rotor	4000r/min	4×50ml	2420×g
NO.6 horizontal rotor	4000r/min	12×10ml	2600×g
NO.7 horizontal rotor	4000r/min	10×10ml	2500×g



12x5ml



6x15ml



8x10ml

3. Structure and Features

This machine adopts DC brushless motor drive, microcomputer control, digital display,



easy operation, low noise, high work efficiency, and good automatic balance effect. Intelligent control, accurate speed and control, there are various rotors to meet the needs of different users.

4. Equipment installation requirements

- (1) The table is solid and flat to prevent vibration or movement of the equipment during operation.
- (2) The power supply has an independent ground wire. It is strictly forbidden to share the zero wire with the ground wire to prevent electric shock from hurting people.
- (3) There should be no corrosive gas and electromagnetic field interference around the equipment to prevent premature failure of the protective layer on the surface of the equipment and interference with electrical components.
- (4) The equipment is placed horizontally to ensure that the four rubber feet are evenly stressed.
- (5) The rotor body is installed by the user according to their own requirements.

5. Operation

Operating procedure:

- (1) Turn on the power switch, set the top speed and working time (Note: the speed time can still be modified during operation);
- (2) Open the electronic lock door cover, and place the centrifuge tube in the sample adding area symmetrically in the rotor;
- (3) According to your requirements, press + to select the speed of this operation with one key, and set the working time;
- (4) When the time reaches zero or press the stop button, it will automatically stop and the buzzer will alarm;
- (5) Press the stop button to reset, call the alarm stop, and each window displays the last set value;
- (6) If you do not need to change the set value, just press the start button, and re-operate when you need to change it;
- (7) Turn off the power when not in use.

6. Warranty period

- (1) The three-guarantee period of the host is one year;
- (2) The shelf life of the rotor is three years, and the plastic rotor is three years;
- (3) Starting from the date of manufacture, the rotor should be replaced with a new rotor after the warranty period. The company will not be liable for accidents caused by failure to replace it in time.

7, Points for attention

- (1) Do not move the centrifuge during operation, and do not open the door cover.



(2) If the glass test tube is broken during the centrifuge, it will cause great vibration, and it should be stopped immediately to replace the new test tube;

When the density of the sample is greater than 1.2g/ml, the maximum speed of the rotor is selected according to the following formula:

$$N'_{\max} = n \sqrt{\frac{1.2g/ml}{1.26 + p}}$$

(P sample density, Nmax rotor allowable maximum speed, n originally set maximum speed)

(3) If an alarm sound occurs, clear and turn off the power switch and operate again.

(4) If the power light is not on, check whether the fuse is burned out.

(5) If there is any abnormal situation, it is not allowed to disassemble the machine for maintenance without authorization, and the manufacturer must be contacted.

8, Equipment maintenance and maintenance methods

(1) The equipment must be operated in strict accordance with the instruction manual, and the inside and outside of the equipment must be kept dry and hygienic before and after each use;

(2) After the equipment is used, clean the centrifuge chamber with neutral detergent and dry it with a soft cloth. It is not allowed to scrub the rotor with non-neutral detergent to prevent chemical corrosion of the inner chamber;

(3) If it is not used for a long time, the centrifuge chamber should be cleaned, and the cleaning agent and water should be avoided in the centrifuge chamber to prevent the centrifuge motor from rusting and reducing its service life, and the door cover should be opened to dry;

(4) The machine should be stored indoors, the ground should be flat, there should be no conductive dust, no corrosive or insulating gas, and there is no other strong vibration source nearby, the site should have ventilation and drainage devices to improve the overall performance of the machine life.