

## high speed refrigerated centrifuge with 16000rpm and 4 by 1L

High speed refrigerated centrifuge has good rotational speed, accurate temperature control and powerful functionality, which can provide reliable separation for different types of samples.

### High Speed Refrigerated Centrifuge

#### Main features

1. High speed and large capacity: the speed can reach 16,000rpm, supporting the capacity of 4×1000ml sample processing, suitable for a variety of complex centrifugal separation tasks.
2. Intelligent operation: Equipped with intelligent rotor automatic identification system to prevent human error and ensure the safety of centrifugation process.
3. Humanized operation interface: equipped with  $\geq 7$ -inch touch screen and physical buttons dual operation interface, real-time synchronous display of the setup parameters and operating data, to facilitate real-time monitoring by the operator.
4. Rich storage function: memory capacity can store up to 99 sets of programs, providing  $\geq 5$  groups of commonly used programs with one key to call, simplifying the experimental operation process, improve work efficiency.



5. Centrifugal force and rotational speed automatic calculation: built-in calculation function, can automatically convert and display centrifugal force (RCF) and rotational speed (RPM), simplify the data processing process.
6. Adjustable acceleration and deceleration control: equipped with linear drive and 10 acceleration and deceleration settings, according to the nature of the sample to adjust the centrifugal conditions, to ensure the separation effect.
7. Energy-saving design: built-in ECO mode, standby or no command, the compressor stops working, energy saving and consumption reduction. Special noise reduction design further reduces the noise during operation.
8. Safety and security features: the use of high-strength anti-impact design and electromagnetic induction protection system, equipped with a double door lock electronic traction protection structure, to ensure the safety of personnel in the operation process.
9. Corrosion resistance and durability: the body adopts all-steel structure, centrifugal chamber using 316 stainless steel and environmental protection anti-corrosion coating, acid and alkali corrosion resistance, to extend the service life of the equipment.
10. Multiple protection: set over-speed, unbalance, door cover protection and other multiple safety protection measures to effectively protect the machine and personnel safety.

## Principle

1. The centrifuge through high-speed rotation to form a strong centrifugal force, forcing the different components in the sample according to the density difference stratification. The freezing function ensures operation in a low-temperature environment, avoiding deterioration or reaction of the sample due to temperature rise during centrifugation, which is suitable for temperature-sensitive substances.
2. Centrifugal Force Principle: When the centrifuge rotates, the material in the sample is subjected to centrifugal force, and the denser components are forced to sink to the bottom of the tube, while the lighter components float on top. Through this layering principle, different components in the sample can be effectively separated.
3. Temperature control system: efficient and environmentally friendly compressor refrigeration system can quickly cool down and maintain the low temperature environment of the sample to ensure the accuracy of the experiment. The equipment can maintain  $-4^{\circ}\text{C}$  below 16000rpm to ensure the stability of the samples.

## Application Areas

1. Biological research: for serum, cells, DNA, proteins and other biological samples separation and purification.
2. Medical testing: in the medical laboratory, widely used in blood analysis, cell separation and other testing projects.
3. Chemical experiments: in chemical analysis, commonly used in the separation of mixtures of different chemical substances.

4. Environmental testing: used for water quality, soil and other environmental samples centrifugal processing and separation.
5. Pharmaceutical industry: in the process of drug research and development, for the extraction and purification of drug components.

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<b>Model</b>	<b>C40R</b>
Maximum speed	16000rpm
Maximum RCF	27375xg
maximum capacity	4x1000ml
Rotation Speed Accuracy	±10rpm
Timer	1 second to 99 hours 59 minutes 59 seconds
Temperature setting range	-20°C to 40°C
Temperature Accuracy	±1.0°C
Noise	≤65dB

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<b>Model</b>	<b>C40R</b>
Rotor Identification	yes
Power supply	230Vac, 50Hz, 20A
Power	2300W
Overall dimensions	770x700x435mm
Net weight	140kg