



Introducing the

Unicorn Tabletop High Speed Refrigerated Centrifuge Family

Reliable performance

Unicorn has cooperated with many research institutions and universities to develop a more durable and safer cast nylon abbreviation (NCP) material, and has continued to invest in the research and development and improvement of NCP materials, making the material performance of the rotary head more stable and durable, which has been widely praised by users. We approach to product development is, and always has been, about giving you more. More quality, more innovation. All of our centrifuges personalize this philosophy. Each centrifuge is designed to operate at low noise levels for a relaxing work environment.

The Benchmark in Ergonomic Operation (NCP)

Security

- 1. Unicorn NCP material has excellent chemical stability and good resistance to acid, alkali and organic solvents. Long term use of aluminum alloy will oxidize and damage the stability of the swivel, which may lead to the risk of cracking of the swivel. Unicorn NCP material is still as new after being used for a long time.
- 2. Unicorn swivel has excellent ductility and high tensile strength. Even if the motor shaft is broken due to corrosion, because of its excellent ductility, Unicorn NCP rotary head can absorb energy by changing its shape after being hit violently, so as to prevent casualties of personnel or property due to high-speed rotating rotary head of the centrifuge. The high tensile strength also prevents the turning head from being broken into pieces due to violent impact, resulting in a wider range of damage.



Environment Protection

1. The weight of Unicorn NCP swivel is light. Compared with the aluminum alloy swivel with the same capacity, the weight of the NCP swivel is reduced by about 60%. The power of the machine with our NCP swivel is about half that of the machine with aluminum alloy swivel. With our 6 ×1000 For example, if the factory operates normally for one year, the machine with our NCP swivel can save 5000 -7500 kilowatt hours of electricity and reduce 1360-2040kg of carbon emissions compared with the machine with aluminum alloy swivel.



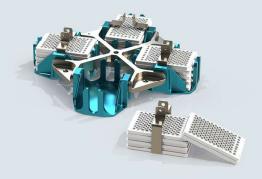
Cost Savings

- 1. Labor cost: The lifting speed of Unicorn NCP is about twice that of aluminum alloy on average, and the average time of single use is saved by 40%, which means that the labor cost can be saved by almost 40%.
- 2. Energy cost: The power used by Unicorn NCP is about 50% less, which means that we can save about 50% in energy cost.
- 3. Use and maintenance cost: Unicorn NCP swivel is light in weight, which greatly reduces the load on the motor and circuit board, prolongs the service life of the machine, greatly reduces the cost of the machine that is used evenly for a single time, and also reduces the maintenance cost.



Better Centrifugation Effect

- 1. Unicorn NCP swivel has excellent thermal insulation performance. The freezing machine starts to work after the rotary head is precooled. The rotary head is subject to small temperature fluctuation in the centrifugal chamber, and the normal temperature machine is subject to small temperature rise effect in the centrifugal chamber during use, which can better protect the sample.
- 2. The centrifugal angle of Unicorn NCP swivel is mostly larger than that of aluminum alloy swivel. Under the same centrifugal force, our effect is better.



TMHS16R Tabletop Micro High Speed Refrigerated Centrifuge



The Centrifuge TMHS16R is a high speed centrifuge for micro capacity needs. It allows for applications in tubes up to 5ml/ 2.0 ml/1.5ml /0.5ml/ 0.2ml. Common rotors for Centrifuge TMHS16R include:



Fixed Angle Rotor
Capacity: 12×1.5/2.2ml
Maximum speed: 16500rpm
Maximum RCF: 21610×g



Fixed Angle Rotor
Capacity: 18×5ml
Maximum speed: 15000rpm
Maximum RCF: 21890×g



Fixed Angle Rotor
Capacity: 24×1.5/2.2ml
Maximum speed: 15000rpm
Maximum RCF: 21630×g



Fixed Angle Rotor
Capacity: 4x8x0.2ml PCR
Maximum speed: 15000rpm
Maximum RCF: 17357xg

Technical Parameter

Model	TMHS16R		
Maximum speed	16500r/min	Power supply	AC 220V 50Hz 10A
Maximum RCF	21630×g	Machine noise	≤52dB(A)
Maximum capacity	18X5ml	Power	800W
Speed accuracy	±10r/min	Acceleration and deceleration	≤10s
Temperature range	-20°C~+40°C	Display	Touchable Display
Temperature accuracy	±1°C	Dimensions	520×320×230mm
Timing range	1-99min59s / 99h99min	Net weight	35kg

Overview

- >>TMHS16R is widely used in molecular biology, molecular chemistry and PCR laboratories. It can be equipped with a variety of capacity turners, and has high cost performance.
- >>The unique patented NCP material swivel is super light, high strength, slow heat conduction, strong corrosion resistance, and fast lifting speed.
- >>The machine surface adopts fine sand grain spraying technology, and the executive standard is IS09001 | level standard.

Features

- >>Safety: The whole machine is made of high-strength steel by one-time stamping, and the swivel is corrosion resistant to avoid the risk of explosion.
- >>Opening mode of fixed angle swivel: rotate for one circle.
- >>Small size body and 10s lifting speed meet users' requirements for efficient separation.
- >>Various centrifugation functions: differential centrifugation function, gradient centrifugation function, inching centrifugation function, timing centrifugation function.
- >>According to the experimental requirements, 10 groups of application programs can be stored and called with one key.
- >>Refrigeration function: environmental friendly refrigerant 134A is used, and the chamber temperature can still be stabilized at 4 °C at the highest speed; The rapid pre cooling function decreases from 25 °C to 4 °C within 6 minutes.
- >>Intelligent temperature control system, which can adjust the refrigeration operation time of the equipment when the door cover is opened/closed.
- >>The 10 gear acceleration and deceleration respectively control the braking time, and the uniform soft brake is designed to avoid the secondary mixing of samples due to vibration during the deceleration process.
- >>5 inch touch screen operation, centrifugal force can be set with accuracy of 1xg, rotational speed accuracy of 1rpm, and time accuracy of 1s. The large screen displays rotational speed, centrifugal force, time, temperature, plus and minus and other parameters. Parameters can be changed during operation without stopping.

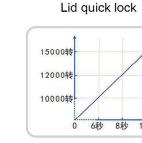
Advantage





Extreme cooling





Noise≤52dB(A

Acc/dec≤10s

THS16R Tabletop High Speed Refrigerated Centrifuge



The Centrifuge THS16R is a high speed centrifuge for micro capacity needs. It allows for applications in tubes up to 50ml/10ml/5ml/2.0 ml/1.5ml /0.5ml 0.2ml.Common rotors for Centrifuge THS16R include:

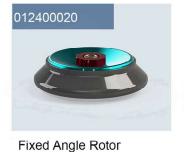


Fixed Angle Rotor
Capacity: 12×1.5/2.2ml
Maximum speed: 16500rpm
Maximum RCF: 21610×g

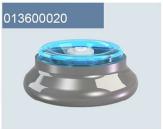


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Maximum speed: 15000rpm
Maximum RCF: 21890×g



Capacity: 24×1.5/2.2ml Maximum speed: 15000rpm Maximum RCF: 21630×g



Fixed Angle Rotor
Capacity: 36×1.5/2.2ml
Maximum speed: 15000rpm
Maximum RCF: 22380×g



Fixed Angle Rotor
Capacity: 12×10ml
Maximum speed: 13000rpm
Maximum RCF: 19690xg



Capacity: 12×15ml

Maximum speed: 12000rpm

Maximum RCF: 15450×g



Fixed Angle Rotor
Capacity: 6×50ml
Maximum speed: 12000rpm

Maximum RCF: 16980×g

Technical Parameter

Model	THS16R		
Maximum speed	16500r/min	Power supply	AC 220V 50Hz 10A
Maximum RCF	22380×g	Machine noise	≤65dB(A)
Maximum capacity	6X50ml	Power	1200W
Speed accuracy	±10r/min	Chamber diameter	Ф240
Temperature range	-20°C~+40°C	Display	Touchable Display
Temperature accuracy	±1°C	Dimensions	590×330×280mm
Timing range	1-99min59s / 99h99min	Net weight	40kg

Overview

- >>THS16R is widely used in molecular biology, molecular chemistry, PCR laboratories, etc. It is a good helper for bacteria separation.
- >>The unique patented NCP material swivel is super light, high strength, slow heat conduction, strong corrosion resistance, and fast lifting speed.
- >>The machine surface adopts fine sand grain spraying technology, and the executive standard is IS09001 |

Features

- >>Safety: the whole machine is made of high-strength steel by one-time stamping, and the swivel is corrosion resistant to avoid the risk of explosion.
- >>It has the automatic recognition function of turning head to prevent the potential safety hazard caused by the user's wrong turning head selection.
- >>Compact body, saving a lot of desktop space for users.
- >>Opening mode of fixed angle swivel: rotate for 1 circle.
- >>99 groups of user-defined program storage, easy to call.
- >>The accidental power off door opening device not only facilitates the cover opening in an emergency, but also elimina -tes the potential safety hazards caused by misoperation.
- >>Refrigeration function: environmental friendly refrigerant 134A is used, and the chamber temperature can still be stabilized at 4 °C at the highest speed; the rapid pre cooling function reduces from 25 °C to 4 °C within 6 minutes.
- >>Level 3 rubber shock absorber has good automatic balance function and unbalanced automatic stop function to protec personal safety.
- >>The 10 gear acceleration and deceleration rate control adopts soft start/stop technology to avoid secondary mixing deceleration.
- >>Multiple centrifugation functions: differential centrifugation, gradient centrifugation, inching centrifugation, and timing centrifugation.
- >>5 inch touch screen operation, centrifugal force can be set with accuracy of 1xg, rotational speed accuracy of 1rpm, time accuracy of 1s, rotational speed, centrifugal force, time, temperature, plus and minus and other parameters. Parameters can be changed during operation without shutdown.
- >> Intelligent temperature control system, which can adjust the refrigeration operation time of the equipment when the door cover is opened/closed.

THS18R Tabletop High Speed Refrigerated Centrifuge



The Centrifuge THS18R is a high speed centrifuge for micro capacity needs. It allows for applications in tubes up to 100 ml/50ml/10ml/ 5ml/2.0 ml/1.5ml/0.5ml 0.2ml. Common rotors for Centrifuge THS18R include:



Fixed Angle Rotor Capacity: 12×1.5/2.2ml Maximum speed: 16500rpm Maximum RCF: 21610×g





Fixed Angle Rotor Capacity: 12×10ml Maximum speed: 13000rpm Maximum RCF: 19690xg



Capacity: 18×5ml Maximum speed: 15000rpm Maximum RCF: 21890×g

Fixed Angle Rotor



Capacity: 12×15ml Maximum speed: 12000rpm Maximum RCF: 15450×g



Fixed Angle Rotor Capacity: 24×1.5/2.2ml Maximum speed: 15000rpm Maximum RCF: 21630×g



Fixed Angle Rotor Capacity: 6×50ml Maximum speed: 12000rpm Maximum RCF: 16980×g



Fixed Angle Rotor Capacity: 36×1.5/2.2ml Maximum speed: 15000rpm Maximum RCF: 22380×g



Fixed Angle Rotor Capacity: 48×1.5/2.2ml Maximum speed: 12000rpm Maximum RCF: 14890×g



Fixed Angle Rotor
Capacity: 4×100ml
Maximum speed: 11000rpm
Maximum RCF: 14200×g



Fixed Angle Rotor
Capacity: 2×2×96 well
Maximum speed: 4000rpm
Maximum RCF: 2300×g



Fixed Angle Rotor
Capacity: 8/16×15ml
Maximum speed: 4000rpm
Maximum RCF: 2200×g

Technical Parameter

Model	THS18R		
Maximum speed	18500r/min	Power supply	AC 220V 50Hz 16A
Maximum RCF	27100×g	Machine noise	≤65dB(A)
Maximum capacity	4X100ml	Power	1200W
Speed accuracy	±10r/min	Chamber diameter	Ф240
Temperature range	-20°C~+40°C	Display	Touchable Display
Temperature accuracy	±1°C	Dimensions	630×470×340mm
Timing range	1-99 min 59s / 99h 99 min	Net weight	70kg

Overview

- >>THS18R is widely used in molecular biology, molecular chemistry and PCR laboratories. It can be equipped with a variety of capacity turners, and has high cost performance.
- >>The unique patented NCP material swivel is super light, high strength, slow heat conduction, strong corrosion resistance, and fast lifting speed.
- >>The machine surface adopts fine sand grain spraying technology, and the executive standard is IS09001 | level.

Features

- >>Safety: The whole machine is made of high-strength steel by one-time stamping, and the swivel is corrosion resistant to avoid the risk of explosion.
- >>Opening mode of fixed angle swivel: rotate for one circle.
- >>Small size body and 10s lifting speed meet users' requirements for efficient separation.
- >>Various centrifugation functions: differential centrifugation function, gradient centrifugation function, inching centrifugation function, timing centrifugation function.
- >>According to the experimental requirements, 10 groups of application programs can be stored and called with one key.
- >>Refrigeration function: environmental friendly refrigerant 134A is used, and the chamber temperature can still be stabilized at 4 °C at the highest speed; The rapid pre cooling function decreases from 25 °C to 4 °C within 6 minutes.
- >>Intelligent temperature control system, which can adjust the refrigeration operation time of the equipment when the door cover is opened/closed.

- >>The 10 gear acceleration and deceleration respectively control the braking time, and the uniform soft brake is designed to avoid the secondary mixing of samples due to vibration during the deceleration process.
- >>5 inch touch screen operation, centrifugal force can be set with accuracy of 1xg, rotational speed accuracy of 1rpm, and time accuracy of 1s. The large screen displays rotational speed, centrifugal force, time, temperature, plus and minus and other parameters. Parameters can be changed during operation without stopping.

Advantage

Noise≤≤65dB(A)



Acc/dec≤10s

THS20R Tabletop High Speed Refrigerated Centrifuge



The Centrifuge THS20R is a high speed centrifuge for micro capacity needs. It allows for applications in tubes up to 750ml/100ml/5ml/2.0ml/1.5ml/0.5ml 0.2ml. Common rotors for Centrifuge THS20R include:



Fixed Angle Rotor Capacity: 12×1.5/2.2ml Maximum speed: 16500rpm Maximum RCF: 21610×g

011200100



Capacity: 18×5ml Maximum speed: 15000rpm Maximum RCF: 21890×g

Fixed Angle Rotor



Fixed Angle Rotor Capacity: 12×10ml Maximum speed: 13000rpm Maximum RCF: 19690xg



Capacity: 12×15ml Maximum speed: 12000rpm Maximum RCF: 15450×g



Fixed Angle Rotor Capacity: 24×1.5/2.2ml Maximum speed: 15000rpm Maximum RCF: 21630×g



Fixed Angle Rotor Capacity: 6×50ml Maximum speed: 12000rpm Maximum RCF: 16980×g



Fixed Angle Rotor Capacity: 36×1.5/2.2ml Maximum speed: 15000rpm Maximum RCF: 22380×g



Fixed Angle Rotor Capacity: 48×1.5/2.2ml Maximum speed: 12000rpm Maximum RCF: 14890×g



Fixed Angle Rotor
Capacity: 6X100ml
Maximum speed: 11000rpm
Maximum RCF: 15200×g



Swing Out Rotor
Capacity: 4X750ml
Maximum speed: 4000rpm
Maximum RCF: 3580×g



Capacity: 4X750ml

Maximum speed: 4000rpm

Maximum RCF: 3580×g

Swing Out Rotor



Capacity: 4×4×96

Maximum speed: 4000rpm

Maximum RCF: 3040×g



Fixed Angle Rotor
Capacity: 4×100ml
Maximum speed: 11000rpm
Maximum RCF: 14200×g



Fixed Angle Rotor
Capacity: 2×2×96 well
Maximum speed: 4000rpm
Maximum RCF: 2300×g



Fixed Angle Rotor
Capacity: 8/16×15ml
Maximum speed: 4000rpm
Maximum RCF: 2200×g

Technical Parameter

Model	THS20R		
Maximum speed	21000r/min	Power supply	AC 220V 50Hz 16A
Maximum RCF	32040×g	Machine noise	≤65dB(A)
Maximum capacity	4X750ml	Power	1200W
Speed accuracy	±10r/min	Display	Touchable Display
Temperature range	-20°C~+40°C	Dimensions	640×610×340mm
Temperature accuracy	±1°C	Net weight	85kg
Timing range	1-99min59s / 99h99min		

Overview

This series has a number of different rotor, which can be used for 4 × 750ml large capacity centrifugation and 21000rpm fixed angle rotating head centrifugation are also available. It can be used in radioimmunoassay, molecular chemistry, biopharmaceutics, cell culture and separation, clinical medicine and other fields.

The unique patented new composite material (NCP) swivel is super light, high strength, low heat conduction, strong corrosion resistance, and fast rise and fall.

The machine surface is sprayed with fine sand grain.

Features

- >> Swivel heads and adapters can be widely selected for 0.2ml-750ml centrifuge tube perforated plates, most culture bottles and a few blood bags.
- >> It can be equipped with biosafety centrifuge, biosafety airtight swivel and biosafety airtight adapter to prevent biological pollution. It is applicable to centrifugation of dangerous samples, such as infectious virus, infectious bacteria and radioactive samples.
- >> Various centrifugation functions: differential centrifugation, gradient centrifugation, inching centrifugation and timing centrifugation.
- >> Electronic door lock, full steel inner cavity protective sleeve, T45 cold rolled steel body, 304 stainless steel centrifugal chamber; IV. Heavy metal safety protection and primary cushioning materials to protect personal safety.
- >> The 10 gear acceleration and deceleration rate control adopts soft start/stop technology to avoid secondary mixing during deceleration.
- >> Refrigeration function: environmental friendly refrigerant 404 is used, and the chamber temperature can still be kept at 4 °C at the highest speed; The rapid cooling function reduces the temperature from 25 °C to 4 °C within 8 minutes.
- >> Intelligent temperature control system, which can adjust the refrigeration operation time of the equipment when the door cover is opened/closed.
- >> Level 3 rubber shock absorber has good automatic balance function and unbalanced automatic stop function to protect personal safety
- >> It has the automatic recognition function of turning head to prevent the potential safety hazard caused by the user's wrong turning head selection.
- >> The 5-inch touch panel operation is simple and convenient. The setting of centrifugal force parameters can be accurate to 1xg, the rotating speed can be accurate to 1rpm, and the time can be accurate to 1s. The large screen displays the rotating speed, centrifugal force, time, temperature, acceleration and deceleration and other parameters. The parameters can be changed during operation without stopping the machine.

Advantage



THS21R Tabletop High Speed Refrigerated Centrifuge



The Centrifuge THS21R is a high speed centrifuge for micro capacity needs. it allows for applications in tubes up to 750ml/100ml/5ml/2.0m/1.5ml/0.5ml 0.2ml. Common rotors for Centrifuge THS21R include;



Fixed Angle Rotor
Capacity: 12×1.5/2.2ml
Maximum speed: 16500rpm
Maximum RCF: 21610×g



Capacity: 18×5ml

Maximum speed: 15000rpm

Maximum RCF: 21890×g

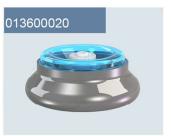
Fixed Angle Rotor



Capacity: 24×1.5/2.2ml

Maximum speed: 15000rpm

Maximum RCF: 21630×g



Fixed Angle Rotor
Capacity: 36×1.5/2.2ml
Maximum speed: 15000rpm
Maximum RCF: 22380×g



Fixed Angle Rotor
Capacity: 12×10ml
Maximum speed: 13000rpm
Maximum RCF: 19690xg



Capacity: 12×15ml

Maximum speed: 12000rpm

Maximum RCF: 15450×g



Fixed Angle Rotor
Capacity: 6×50ml
Maximum speed: 12000rpm
Maximum RCF: 16980×g



Fixed Angle Rotor
Capacity: 48×1.5/2.2ml
Maximum speed: 12000rpm
Maximum RCF: 14890×g



Fixed Angle Rotor
Capacity: 6X100ml
Maximum speed: 11000rpm
Maximum RCF: 15200×g



Swing Out Rotor
Capacity: 4X750ml
Maximum speed: 4000rpm
Maximum RCF: 3580×g



Capacity: 4X750ml

Maximum speed: 4000rpm

Maximum RCF: 3580×g

Swing Out Rotor



Capacity: 4×4×96

Maximum speed: 4000rpm

Maximum RCF: 3040×g



Fixed Angle Rotor
Capacity: 4×100ml
Maximum speed: 11000rpm
Maximum RCF: 14200×g



Fixed Angle Rotor
Capacity: 2×2×96 well
Maximum speed: 4000rpm
Maximum RCF: 2300×g



Fixed Angle Rotor

Capacity: 8/16×15ml

Maximum speed: 4000rpm

Maximum RCF: 2200×g



Fixed Angle Rotor
Capacity:6x250ml
Maximum speed: 8000rpm
Maximum RCF: 11840×g

Technical Parameter

Model	THS21R		
Maximum speed	21000r/min	Power supply	AC 220V 50Hz 16A
Maximum RCF	32040×g	Machine noise	≤65dB(A)
Maximum capacity	4X750ml	Power	1500W
Speed accuracy	±10r/min	Display	Touchable Display
Temperature range	-20°C~+40°C	Dimensions	640×610×340mm
Temperature accuracy	±1°C	Net weight	85kg
Timing range	1-99 min 59s / 99h 99 min	Chamber diameter	Ф420

Overview

This series has a number of different rotor, which can be used for 4 × 750ml large capacity centrifugation and 21000rpm fixed angle rotating head centrifugation are also available. It can be used in radioimmunoassay, molecular chemistry, biopharmaceutics, cell culture and separation, clinical medicine and other fields.

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The machine surface is sprayed with fine sand grain.

Features

- >> Swivel heads and adapters can be widely selected for 0.2ml-750ml centrifuge tube perforated plates, most culture bottles and a few blood bags.
- >> It can be equipped with biosafety centrifuge, biosafety airtight swivel and biosafety airtight adapter to prevent biological pollution. It is applicable to centrifugation of dangerous samples, such as infectious virus, infectious bacteria and radioactive samples.
- >> Various centrifugation functions: differential centrifugation, gradient centrifugation, inching centrifugation and timing centrifugation.
- >> Electronic door lock, full steel inner cavity protective sleeve, T45 cold rolled steel body, 304 stainless steel centrifugal chamber; IV. Heavy metal safety protection and primary cushioning materials to protect personal safety.
- >> The 10 gear acceleration and deceleration rate control adopts soft start/stop technology to avoid secondary mixing during deceleration.
- >> Refrigeration function: environmental friendly refrigerant 404 is used, and the chamber temperature can still be kept at 4 °C at the highest speed; The rapid cooling function reduces the temperature from 25 °C to 4 °C within 8 minutes.
- >> Intelligent temperature control system, which can adjust the refrigeration operation time of the equipment when the door cover is opened/closed.
- >> Level 3 rubber shock absorber has good automatic balance function and unbalanced automatic stop function to protect personal safety
- >> It has the automatic recognition function of turning head to prevent the potential safety hazard caused by the user's wrong turning head selection.
- >> The 5-inch touch panel operation is simple and convenient. The setting of centrifugal force parameters can be accurate to 1xg, the rotating speed can be accurate to 1rpm, and the time can be accurate to 1s. The large screen displays the rotating speed, centrifugal force, time, temperature, acceleration and deceleration and other parameters. The parameters can be changed during operation without stopping the machine.

Advantage



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