

# Benchtop|High Speed |Ventilated |Microcentrifuge DS-16C

#### • O Product Overview

The DS-16C micro centrifuge offers a wide selection of rotors tailored to different requirements, accommodating PCR strips, filter tubes, as well as 2ml and 5ml micro-liter tubes. Its outstanding performance and versatile rotor choices make it ideal for various applications, including microbiological research, protein biochemistry, and clinical chemistry. Utilizing micro tubes ranging from 1.5ml to 5ml, this centrifuge serves diverse purposes like sample pelleting, sedimentation, preparation, and purification



#### • 0

- 1. Bench top Micro centrifuges High Speed Clinical Centrifuge DS-16C use Microprocessor control with frequency conversion A.C. motor drive.
- 2. Large LED display clearly shows the operation status, parameters such as speed, timer, RCF, rotor, program (memory), acceleration and deceleration information and error code information.
- 3. Bench top Micro centrifuges High Speed Clinical Centrifuge DS-16C Provides 10 acceleration rates and 10 braking ramps to effectively avoid secondary sedimentation and better centrifugation results. Fast acceleration rate reaches 165,000rpm in 15 seconds, and so does the braking ramp.
- 4. Bench top Micro centrifuges High Speed Clinical Centrifuge DS-16C offers Automatic cap locking and fixing during rotor operation
- 5. Rotor can be easily replaced
- 6. Bench top Micro centrifuges High Speed Clinical Centrifuge DS-16C's Noise level below 55 DBA at maximum rotational speed
- 7. Automatic troubleshooting with error codes and alarms displayed on screen.
- 8. Safe electrical lid interlock, door cannot be opened while rotor is running, machine will not run with lid open and error codes appear.

MODEL NO	DS-16C		
Speed range(rpm)	0-16500rpm adjustable		
Max Capacity(ml)	12*5ml		
RCF range (xg)	0-19480xg adjustable		
Noise(DBA)	55dB(A)		
ACC/DEC	1-10 rates		
Max. acceleration time [s]	15 seconds		
Time range	1-99minutes 59s adjustable		
Speed accuracy	±10r/min		
Dimension(mm)	340*260*220mm		
Net weight(without rotor)	15KGS		
Power supply	AC220V,50HZ,10A,370W		
Max. braking time [s]	15 seconds		



No.	Rotor	Max.Capacity	Max. speed	Max. RCF	Note	
NO 1	Angle rotor	12×1.5-2.2ml				
	Adapter	12×0.5ml				
		12×0.2ml	16500r/min	19176xg	EP/PP tube	
NO.2	Angle rotor	12×5ml				
3	Adapter		16500r/min	19480xg	EP/PPtube	
		12×1.5ml				
NO.3	Angle rotor					
	8×8×0.2ml		13500r/min	16480xg	PCR 8 strip tubes	
NO.4	Angle rotor	24×1.5/2.2ml				
	Adapter					
		24×0.5ml	14000r/min	18407xg	EP/PP tube	
	24×0.2ml					



### Benchtop|High Speed |Ventilated |Microcentrifuge DS-16R

#### • O Product Overview

Direct Drive by AC Frequency Conversion Motor: Ensures high precision, low noise, and a long service life, providing reliable and efficient performance.

Microcomputer Control with 7-Inch LCD Display: Displays rotor number, speed, centrifugal force, time, acceleration and deceleration, and other key parameters simultaneously for easy monitoring.

10 Acceleration and Deceleration Curves: Supports up to 14,000 rpm for any rotor with the fastest acceleration and deceleration in just 20 seconds. Additionally, 15 user-editable programs cater to various experimental needs.

High-Efficiency Environmental Protection Refrigeration System: Features eco-friendly refrigeration with precise temperature control, ensuring no environmental pollution.

Automatic Condensation Evaporation: Automatically evaporates condensed water, eliminating the need for manual cleaning after prolonged use.

Self-Absorbing Electronic Door Lock: Reduces the effort required to close the door, enhancing user convenience and ease of operation.

Comprehensive Safety Protections: Includes overspeed, over temperature, and electronic gyroscope imbalance monitoring, ensuring reliable operation and safety during use.



MODEL NO	DS-16C
Max. RPM	16,500rpm
Max.Capacity	18 x 5ml
Max.RCF	19480xg
Time control	1-99minutes 59s adjustable
Noise level (dB)	55dB(A)
Display	LED
Refrigerant	R 290
Dimension (W x D x H, mm)	440x300x330mm(LxWxH)
Speed accuracy	±10r/min
Temp. Range	-20 °C ~ 40°C
Temperature control accuracy	±1
ACC/DEC	10/10 steps
Program memory	15
Weight without rotor (kg)	35kg
Power supply	AC220V,50HZ,10A; 700W





No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12×1.5/2.2ml			
	Adapter	12×0.5ml	16500r/min	19176xg	PP/PC tube
		12×0.2ml			
NO.2	Angle rotor	24×1.5/2.2ml			
<b>@</b> `	Adapter	24×0.5ml	14500r/min	19956xg	PP/PC tube
NO.3	Angle rotor	8×8×0.2ml	14000r/min	16480xg	PCR 8-tube strips
NO.4	Angle rotor	18×5ml			PP/PC
Adapter		18×1.5ml	12000r/min	13668xg	tube(Round bottom)
					PP/PC tube



### Benchtop|High Speed |Ventilated |Micro Hematocrit Centrifuge DS-16W

#### • O Product Overview

The DS-16W High-Speed Centrifuge Machine is furnished with fixed-angle rotors suitable for 2ml to 5ml microcentrifuge tubes. It finds extensive utility across laboratories, chemical facilities, hospitals, and in any domain requiring high-speed functionality for micro-capacity tasks. As a versatile laboratory instrument, it serves various purposes, including the separation and processing of small sample volumes. This centrifuge is a staple in laboratories for a multitude of applications such as biological sample separation, DNA analysis, cell culture, and biochemistry tasks.

Benchtop High Speed Centrifuges deliver efficient sample processing in clinical protocols, cell culture applications, precipitation purposes, microplate processing and separation of DNA, RNA, Viruses and proteins in biochemistry, medical treatment, food safety, and animal husbandry, etc.

#### • 0

- 1. Compact and space-saving High-Speed centrifuge
- 2. Speed range up to 16500 r/min, Max.RCF: 19480xg, Max.capacity: 10\*5ml
- 3. Microprocessor control with frequency conversion A.C. motor drive
- 4. High-Speed Centrifuge Machine TG16W Features Quiet technology, recognized with a "low noise Highest speed operation noise less than 58 decibels.
- 5. Three levels of damping system, 10 kinds of lifting and lowering speed curves, and 9 self-defined operating procedures that can be stored and recalled to meet various experimental needs.
- 6. LCD Display shows Speed, Timer, RCF, Rotors, Program(Memory), Acceleration& Deceleration information, and Error code details.
- 7. Easily exchangeable rotors
- 8. Double layers sealing ring ensures excellent sealing for the centrifuge lid and the instrument.
- 9. Equipped with over-speed, over-temperature protection, electronic safety door lock, and other multi-level safety features to ensure user and machine safety.
- 10. Emergency lid-lock release in case of power failure.
- 11. Gas hinge for lid drop protection.

MODEL NO	DS-16W	
Speed range(rpm)	0-16500rpm adjustable	
Max Capacity(ml)	10*5ml	
RCF range (xg)	0-19480xg adjustable	
Noise(dBA)	55dB(A)	
ACC/DEC	1-10 rates	
Time range	1-99minutes 59s adjustable	
Speed accuracy	±10r/min	
Dimension(mm)	340*260*220mm	
Net weight(without rotor)	15KGS	
Power supply	AC220V,50HZ,10A,200W	





No.	ltem	Capacity	Max. speed	Max.RCF	Note
NO.1	Angle rotor	12×1.5/2.2ml			
	Adapter		16500r/min	19175xg	PP/PCtube
		12×0.2ml			
NO.2	Angle rotor	10×5ml			
	Adapter	10×1.5ml	16500r/min	19480×g	PP/PCtube
NO.3	Capillary rotor	24 pieces	12000r/min	13684xg	Capillary tube



### Benchtop|High Speed |Ventilated |Centrifuge DS-16-WS

#### • 0

#### **Product Overview**

Our high-speed centrifuge DS-16-WS features a versatile selection of fixed-angle rotors, accommodating PCR tubes, test tubes, and round-bottom tubes. It offers remarkable capacity, holding up to  $4 \times 100$  ml in a fixed angle rotor. With a broad range of rotors and accessories and impressive RCF values reaching up to  $23,120 \times g$ , it proves idea for a diverse array of applications.

• 0

- 1. Compact and space-saving centrifuge.
- 2. High Speed Portable Centrifuge DS-16-WS featured A.C. Frequency conversion motor direct drive, high precision, low noise, long service life.
- 3. Microprocessor control, color break code screen display, program can be programmed and stored, speed, centrifugal force, time can be displayed at the same time.
- 4. High Speed Portable Centrifuge DS-16-WS special Quiet technology, "low noise", the highest speed operation noise is less than 58 decibels.
- 5. High Speed Portable Centrifuge 16000rpm DS-16-WS features Three levels of damping system, 10 kinds of Lifting and lowering speed curve, 30 self-defined operating procedures can be stored and recalled, can meet different experimental needs.
- 6. With over-speed, over-temperature, electronic safety door lock and other multi-level protection functions to ensure the safety of man and machine.
- 7. Metal housing, metal lid, and stainless steel centrifuge chamber are autoclave-able and resistant detergents and disinfection liquids.

MODEL NO	DS-16-WS		
Speed range(rpm)	0-16500rpm adjustable		
Max Capacity(ml)	4*100ml		
Display	LCD		
Noise(dBA)	58dB(A)		
Dimension(mm)	470x345x295mm		
Net weight(without rotor)	30KGS		
Speed accuracy	±10rpm		
RCF range (xg)	0-19480xg adjustable		
Time range	1-99minutesadjustable		
Acceleration /Deceleration rates	0-10		
Motor	Frequency Converter motor		
Power supply	AC220V,50HZ,10A,600W		





No.	Rotor	Capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12×1.5/2.2ml			
	Adapter	12×0.5ml	-		
				40476	
	0		16500r/min	19176xg	PP/PC tube
		12×0.2ml			
NO.2	Angle rotor Adapter	12×5ml			PP/PC tube
	Adapter				
		12×1.5ml	16500r/min	19480xg	PP/PC tube
NO.3	Angle rotor	12×10ml			PP/PC tube
	Adapter		1		
	8	12×5ml	12000r/min	13523xg	PP/PC tube
		12~5111			
NO.4	Angle rotor				
		24×1.5/2.2ml	-		
	Adapter	24×0.5ml	ml 17000r/min 16704v	18407xg	
	0	24×0.2ml			PP/PC tube
		36×1.5/2.2ml		15304xg	
		36×0.5ml			
NO.5	Angle rotor	36×0.2ml			
	AngleTotor				PCR8-tube
		12×8×0.2ml	12000r/min	16985xg	strips
NO.6		10×15ml			
	Angle rotor Adapter	10×13ml 10×10ml	11000r/min	14069xg	
		10×10ml		14069Xg	
					4
		6×50ml			PP/PC tube
		6×15ml 6×10ml	4		
	۲		11000r/min	13122xg	
		6×1.5ml			
NO.7	Angle rotor	4×10/100ml			
	Adapter	4×50ml	1		
		4×15ml	10000r/min	10979xg	PP/PC tube
		4×10ml	10000r/min	10979xg	
		4×5ml	1		
		4×1.5ml			



### Benchtop|High Speed |Ventilated |Centrifuge DS-20-WS

### • •

**Product Overview** 

The high-speed centrifuge DS-20-WS is a versatile solution equipped with a variety of fixed-angle rotors. This all-purpose centrifuge is designed to accommodate PCR tubes, test tubes, and round-bottom tubes, offering exceptional capacity with a 4 x 100 ml fixed-angle rotor configuration. With its extensive selection of rotors and accessories, along with impressive RCF values reaching up to 31,061 x g, it is well-suited for a diverse range of applications.



#### • 0

- 1. Compact and space-saving centrifuge
- 2. DS-20-WS use A.C. Frequency conversion motor direct drive, high precision, low noise, long service life
- 3. Microcomputer control, color break code LED screen display, program can be programmed and stored, speed, centrifugal force, time can be displayed at the same time.
- 4. 3 levels damping for anti vibration. Programmable and storable, stores up to 30 programs and provides direct user access with one keystroke save. The stored parameter: combination remains in the memory even after the centrifugation has been switched off.
- 5. DS-20-WS Provides the 10 acceleration rates and 10 braking ramp, to effectively avoid secondary sedimentation, with better centrifugation effect.
- 6. Automatic lid-locking and holding during rotor run
- 7. Automatic rotor identification system, coded rotor identification prevents the rotor from over speeding.
- 8. Easily exchangeable rotors, special rotor connector which makes it easy to load and unload rotor.
- $9. \quad {\rm Automatic \, trouble shooting \, with \, indication \, of \, error \, code \, and \, alarm \, on \, the \, screen.}$
- 10. Research Use 20000 rpm Centrifuge Machine DS-20-WS features.
- 11. Speed up to 21000rpm depends on rotor type
- 12. With over-speed, over-temperature, electronic safety door lock and other multi-level protection functions to ensure the safety of man and machine

MODEL NO	DS-20-WS		
Speed range(rpm)	0-21000rpm adjustable		
Max Capacity(ml)	4*100ml		
Display	LCD		
Noise(dBA)	58Db (A)		
Dimension(mm)	470x345x295 mm		
Net weight(without rotor)	30 KGS		
Speed accuracy	±10rpm		
RCF range (xg)	0-31061xg adjustable		
Time range	1-99minutes 59s adjustable		
Acceleration /Deceleration rates	1-10		
Motor	Frequency Converter motor		
Power supply	AC220V,50HZ,10A,600W		

- C



No.	Rotor	Capacity	Max.speed	Max. RCF	Note
NO.1	Angle Rotor Adapter	12×1.5-2.2ml 12×0.5ml			
		12×0.2ml	21000r/min	31061×g	PP/PC tube
NO.2	Angle Rotor	12×5ml	16500r/min	19480xg	PP/PC tube (round bottom)
	Adapter	12×1.5ml			
	2	12×10ml			
NO.3		12×5ml	15000r/min	21130xg	PP/PC tube
		12×1.5ml			
NO.4	Angle Rotor	24×1.5-2.2ml			
	Adapter	24×0.5ml	16000r/min	24041xg	
	•	24×0.2ml			PP/PC tube
		48×1.5-2.2ml	14000r/min		
	1	48×0.5ml		20379xg	
NO.5	Angle	48×0.2ml 12×8×0.2ml			PCR8-tube
	Rotor	12^0^0.2111	12000r/mi n	16985x g	strips
NO.6	Angle Rotor	10×15ml			PP/PC tube (pointy bottom)
	Adapter	10×5ml			
	I		13000r/min	19650x g	PP/PC tube
	Adapter	10×1.5ml			
	۲	6×1.5ml			PP/PC tube(round/pointy bottom)
		6×50ml	170	10707	PP/PC tube
	V	6×15ml	130 00r/min	18327x g	
		6×10ml		9	
NO.9	Angle Rotor	4×10/100ml			PP/PC tube(round bottom)
	Adapter	4×50ml			PP/PC tube
CO.		4×15ml			
	-	4×10ml	11000r/min	13284x	
		4×5ml 4×1.5ml		g	



NO.6	Angle Rotor	10×15ml			PP/PC tube(pointy
	Adapter				bottom)
	8	10×5ml		PP/PC tube	
		10.000	13000r/ min	19650xg	PP/PC tube
	Adapter				
		10×1.5ml			
	Ũ	6×1.5ml			PP/PC tube (round/pointy bottom)
		6×50ml			
		6×15ml	130 00r/min	18327xg	PP/PC tube
		6×10ml			
NO.9	Angle Rotor	4×10/100ml			PP/PC tube(round bottom)
	Adapter	4×50ml			
	0	4×15ml	11000r/	13284xg	
		4×10ml	min	5	PP/PC tube
		4×5ml			
		4×1.5ml			



## Benchtop | Multipurpose | High Speed | Ventilated | Centrifuge DS-200B

#### • 0

#### **Product Overview**

The all-purpose large capacity high-speed centrifuge DS-200B stands out for its versatility and compact design, making it a perfect fit for any lab. Equipped with a wide array of rotors and accessories and boasting high RCF values, it accommodates a diverse range of applications. Its tube capacities span from 0.2 ml to 100 ml in fixed-angle rotors and from 1.5 ml to 750 ml in swing-out rotors. Additionally, it can centrifuge microtiter plates, well plates, and vacuum blood collection tubes.



#### • 0

- 1. Compact and space-saving High-Speed centrifuge
- 2. Max.capacity: 6\*100ml fixed angle rotor, 4\*750ml swing out rotor
- 3. Observations window on lid for speed calibration and noise measurement.
- 4. Microprocessor control with 750W-4K-21K frequency conversion A.C. motor drive.
- 5. Noise level lower than 58 decibel at the highest rotational speed.
- Three levels of damping system, Programmable and storable, stores up to 30 programs and provides direct user access with one keystroke save. The stored parameter: combination remains in the memory even after the centrifugation has been switched off.
   Double layers sealing ring made for the centrifuge lid and the instrument to keep long good sealing.
- Double layers sealing ring made for the centrifuge lid and the instrument to keep long good sealing.
   With over-speed, over-temperature, electronic safety door lock and other multi-level protection functions to ensure the safety of man and machine.
- 9. Provides the 10 acceleration rates and 10 braking ramp, to effectively avoid secondary sedimentation, with better centrifugation effect.
- 10. Automatic lid-locking and holding during rotor run
- 11. Easily exchangeable rotors
- 12. Automatic troubleshooting with indication of error code and alarm on the screen.
- 13. LCD touch screen with simple&clear interface for viewing and setting parameters.

MODEL NO	DS-200D		
Speed range(rpm)	0-20000rpm adjustable		
Max Capacity(ml)	4*750ml		
Display	LCD		
Noise Level(dBA)	≦58dB(A)		
Dimension(mm)	560x440x360mm		
Net weight(without rotor)	560x440x360mm1		
Speed accuracy	±10rpm		
RCF range (xg)	0-28174kg		
Time range	1-99minutesadjustable		
Acceleration /Deceleration rates	1-10		
Motor	Frequency Converter motor		
Power supply	AC220V,50HZ,10A,770W		



No.	Rotor	Capacity	Max. speed	Max.RCF	Note
NO.1	Angle rotor	12×1.5-2.2ml			
	Adapter	12×0.5ml			
	Ũ	12×0.2ml	20000r/min	28174xg	PP/PCtube
NO.2	Angle rotor	12×5ml			
	Adapter	12×1.5ml	17000r/min	20680xg	PP/PCtube
NO.3	Angle rotor	24×1.5-2.2ml			
	Adapter	24×0.5ml			
		24×0.2ml	16000r/min	24041xg	PP/PCtube
NO.4	Angle rotor	10×15ml			
	Adapter	10×10ml			
		10×5ml	15000r/min	26161×g	PP/PCtube
	Adapter	10×1.5ml			



N(15	A				
NO.5	Angle rotor Adapter	48×1.5-2.2ml 48×0.5ml	15000r/min	23394xg	
<b>@</b> ?		48×0.2ml			PP/PCtube
NO.6	Angle rotor	12×10ml			
	Adapter	12×5ml/1.5ml	15000r/min	21130xg	PP/PCtube
NO.7	Angle rotor	6×50ml			
	Adapter	6×15ml			
		6×10ml			
	Ũ	6×1.5ml	14000r/min	21255xg	PP/Pctube
NO.8	Angle rotor	6×100ml			
	Adapter	6×50ml			
		6×15ml	• 11000r/min	14610xg	PP/Pctube
		6x10 ml	110001/1111	14010/9	
		6x5 ml			
		6x1.5 ml			
NO.9	Angle rotor	8×50ml	1		
	Adapter	8×15ml	1		
1 I					
	Ũ	8×10ml	12000r/min	17226xg	PP/PCtube
	Adapter	8×10ml 8×1.5ml	12000r/min	17226xg	PP/PCtube
NO.10	Adapter D Swing bucket		12000r/min	17226xg	Round cup
NO.10	Ũ	8×1.5ml	12000r/min	17226xg	
NO.10	Swing bucket	8×1.5ml 4×250ml			Round cup Vacuum blood collection
NO.10	Swing bucket	8×1.5ml 4×250ml 4×9×2-5ml	12000r/min 4000r/min	17226xg 3049xg	Round cup Vacuum blood collection tube
NO.10	Swing bucket	8×1.5ml 4×250ml 4×9×2-5ml 4×5×10-15ml			Round cup Vacuum blood collection
NO.10	Swing bucket	8×1.5ml 4×250ml 4×9×2-5ml 4×5×10-15ml 4×50ml			Round cup Vacuum blood collection tube
NO.10 NO.11	Swing bucket	8×1.5ml 4×250ml 4×9×2-5ml 4×5×10-15ml 4×50ml 4×100ml			Round cup Vacuum blood collection tube PP/PCtube
	Swing bucket Adapter	8×1.5ml 4×250ml 4×9×2-5ml 4×5×10-15ml 4×50ml 4×100ml			Round cup Vacuum blood collection tube PP/PCtube Square cup Vacuum blood collection
	Swing bucket Adapter	8×1.5ml 4×250ml 4×9×2-5ml 4×5×10-15ml 4×50ml 4×100ml 4×9×1.5ml			Round cup Vacuum blood collection tube PP/PCtube Square cup
	Swing bucket Adapter Swing bucket	8×1.5ml 4×250ml 4×9×2-5ml 4×5×10-15ml 4×50ml 4×100ml 4×9×1.5ml 4×400ml			Round cup Vacuum blood collection tube PP/PCtube Square cup Vacuum blood collection tube
	Swing bucket Adapter Swing bucket Adapter Adapter	$8 \times 1.5 ml$ $4 \times 250 ml$ $4 \times 9 \times 2-5 ml$ $4 \times 5 \times 10-15 ml$ $4 \times 50 ml$ $4 \times 100 ml$ $4 \times 9 \times 1.5 ml$ $4 \times 400 ml$ $4 \times 16 \times 2-5 ml$	4000r/min	3049xg	Round cup Vacuum blood collection tube PP/PCtube Square cup Vacuum blood collection
	Swing bucket Adapter Swing bucket Adapter Adapter	$8 \times 1.5 ml$ $4 \times 250 ml$ $4 \times 9 \times 2-5 ml$ $4 \times 5 \times 10-15 ml$ $4 \times 50 ml$ $4 \times 100 ml$ $4 \times 9 \times 1.5 ml$ $4 \times 400 ml$ $4 \times 16 \times 2-5 ml$ $4 \times 9 \times 10-15 ml$	4000r/min	3049xg	Round cup Vacuum blood collection tube PP/PCtube Square cup Vacuum blood collection tube



NO.12	Swing bucket	4×500ml			Round cup
	Adapter	4×17×2-5ml			
20		4×8×10-15ml			Vacuum blood collection tube
		4×3×50ml	4000r/min	3354xg	PP/PCtube
		4×100ml			
NO.13	Swing bucket	4×600ml			Square cup
	Adapter	4×25×2-5ml			Vacuum blood collection tube
		4×12×10-15ml	4000	7754	
		4×5×50ml	4000r/min	3354xg	PP/PCtube
		4×4×100ml			
NO.14	Swing bucket	4×750ml			Round cup
	Adapter	4×26×2-5ml			Vacuum blood collection tube
FS	(10)	4×13×10-15ml	4000r/min	3443xg	
	- Aller	4×5×50ml		5	PP/PCtube
		4×3×100ml			
NO.15	Microplate rotor	2×2×96 well			Square cup
	Adapter	2×32×1.5ml	4200r/min	n 2860xg	PP/PCtube



### Benchtop|High Speed |Refrigerated |Centrifuge DSL-16M

### O Product Overview

The high-speed refrigerated centrifuge DS-L-16M stands out with its impressive maximum speed of 16,500 rpm. Its built-in refrigeration feature ensures precise temperature control during the separation process, crucial for preserving sample integrity. Compatible with a range of fixed-angle rotors and adapters, it caters to high-speed centrifugation needs spanning volumes from 0.2ml to 100ml. Despite its robust capabilities, its compact design makes it a perfect fit for labs with





#### • 0

- 1. 1.Direct Drive AC Variable Frequency Motor: Experience high precision, low noise, and an extended lifespan for reliable and efficient operation.
- 2. 2.High-Efficiency and Environmentally Friendly Refrigeration System: Our centrifuge adopts an advanced cooling system that not only ensures precise temperature control but also eliminates environmental pollution.
- 3. 3.Silent Technology and "Low-Noise" Patent Certification: With our innovative "Low-Noise" technology, enjoy a quiet laboratory environment as the centrifuge operates at a maximum noise level below 58 decibels.
- 4. 4.Microcomputer Control and Color LCD Display: Take full control of your experiments with ease. Our centrifuge's userfriendly interface allows programming, storage, and simultaneous display of speed, centrifugal force, and time on a vibrant color screen.
- 5. 5.10 adjustable lift speed curves. Customize up to 30 programmable and storable free programs to meet your diverse experimental needs.
- 6. 6.Double-Layer Sealing Rings on the Door Cover and Body: Designed to meet the demands of long-term use, our centrifuge features excellent sealing performance, ensuring airtight operation.
- 7. 7. Three-Level Damping System and Versatile Speed Curves: Experience optimal stability and versatility with our centrifuge's three-level damping system.
- 8. 8.Multiple Safety Features: We prioritize safety. Our centrifuge is equipped with multiple layers of protection, including overspeed detection, overheating prevention, and an electronic safety door lock, ensuring the well-being of both the user and the machine.

MODEL NO	DS-L-16M		
Max. RPM	16,500rpm		
Max.Capacity	4 x100ml		
Max.RCFA	19480xg		
Time control	1-99minutes 59s adjustable		
Noise level (dB)	≦58dB(A)		
Display	LCD		
Refrigerant	R134A		
Dimension (W x D x H, mm)	600x570x380mm(LxWxH)		
Speed accuracy	±10r/min		
Temp. Range	-20 °C ~ 40°C		
Temperature control accuracy	±1°C		
ACC/DEC	10/10 steps		
Program memory	30		
1Weight without rotor (kg)	70 kg		
P1ower supply	AC220V,50HZ,10A; 880W		



No.	ltem	Max. capacity	Max.speed	Max.RCF	Note	
NO.1	Angle rotor	12×1.5/2.2ml	_			
	Adapter	12×0.5ml	16500r/min	19176xg	PP/PC tube	
	Adapter					
NO.2	Angle rotor	12×5ml				
٢	Adapterx	12×1.5ml	16500r/min	19480xg	PP/PC tube	
NO.3	Angle rotor	12×10ml				
	Adapter	12×5ml		13523xg	PP/PC tube	
NO.4	Angle rotor	24×1.5/2.2ml				
	Adapter	24×0.5ml	14000r/min	18407xg	PP/PC tube	
<b>9</b> 0	Adapter	24×0.2ml	– 140007/min	18407xg	PP/PC tube	
N0.5	Angle rotor	36×1.5/2.2ml				
<b>@</b> ?	Adapter	36×0.5ml	13000r/min	15304xg	PP/PC tube	
	Adapter	36×0.2ml				
NO.6	Angle rotor	12×8×0.2ml	12000r/ min	16985xg	PCR 8-tube strips	



## Benchtop|High Speed |Refrigerated |Centrifuge DSL-20M

#### • O Product Overview

The benchtop high-speed refrigerated centrifuge DSL-20M offers an impressive maximum speed of 21,000 rpm, making it a powerful tool for various applications. Its adaptable fixed-angle head rotors can handle variable volumes, with a maximum capacity of  $4 \times 100$  ml. The built-in refrigeration feature ensures precise temperature control, crucial for maintaining sample integrity during the separation process.

Designed to accommodate a wide array of fixed-angle rotors and adapters, this centrifuge is versatile, capable of handling volumes ranging from 0.2ml to 100ml. Despite its robust capabilities, its compact design makes it a perfect fit for laboratories with limited space, offering efficiency without compromising on performance.



#### • 0

#### **Product Features**

Microprocessor controlled with frequency conversion A.C. motor drive Quiet technology, low noise patent certificate recognized, the highest speed rotation noise is less than 58 decibels.

Safety interlock system to prevent opening the centrifuge lid when the rotor is rotating Unbalance sensor, over speed and over temperature protection

LCD display, showing the speed, time, RCF during operation.

MODEL NO	DSL-20M
Max. RPM	0-21000rpm adjustable
Max.Capacity	4 x100ml
Max.RCF	0-31061xg adjustable
Time control	1-99minutes 59s adjustable
Noise level (dB)	≦58dB(A)
Display	LCD
Refrigerant	R134A
Dimension	600x570x380mm(LxWxH)
Speed accuracy	±10r/min
Temp. Range	-20 °C ~ 40°C
Temperature control accuracy	±1°C
ACC/DEC	10/10 steps
Program memory	30
Weight without rotor (kg)	80 kg
Power supply	AC220V,50HZ,10A;880W



No.	ltem	Max. capacity	Max.speed	Max.RCF	Note	
NO.1	Angle rotor	12×1 5/2 2ml				
	Adapter	12×1.5/2.2ml	4	31061xg		
	Adapter	12×0.5ml	21000r/min		PP/PC tube	
	<b>V</b>	12×0.2ml				
	Angle rotor	12×5ml				
NO.2	Adapter	12×1.5ml	16500r/min	19480xg	PP/PC tube	
NO.3	Angle rotor	12×10ml				
	Adapter	12×5ml				
	l	12×1.5ml	15000r/min	21130xg	PP/PC tube	
NO.4	Angle rotor	24×1.5/2.2ml				
C	Adapter	24×0.5ml	16000r/min	24041xg	PP/PC tube	
		24×0.2ml				
N0.5	Angle rotor	48×1.5/2.2ml	14000r/min	20379xg		
States of	Adapter	48×0.5ml	140001/1111	2037.3×9		
	Ũ	48×0.2ml			PP/PC tube	
NO.6	Angle rotor	12×8×0.2ml	12000r/min	16985xg	PCR 8-tube strips	
NO.7	Angle rotor	10×15ml				
	Adapter	10×5ml	13000r/min	19650xg	PP/PC tube	
	Adapter	10×1.5ml				
NO.8	Angle rotor	6×50ml				
	Adapter	6×15ml	4			
	•	6×10ml	13000r/min	18327xg	PP/PC tube	
	Adapter	6×1.5ml				
NO.9	Angle rotor	4×10/100ml				
	Adapter	4×50ml	1			
20		4×15ml	11000r/min	13284xg	PP/PC tube	
		4×10ml	1			
		4×5ml 4×1.5ml	1			



### Benchtop|High Speed |Refrigerated |Centrifuge DS-200R



#### **Product Overview**

The combination of high speed and refrigeration capabilities ensures precise temperature control during centrifugation, preserving sample integrity and allowing for sensitive experiments and analyses.

They are essential for separating substances of different densities in biological and chemical samples, such as DNA, proteins, and cells. These centrifuges are particularly valuable in fields like molecular biology, biochemistry, and clinical diagnostics, enabling researchers to isolate and purify target components efficiently.



#### • 0

- 1. Intelligent microprocessor control system that can display set and actual parameters simultaneously.
- 2. Frequency conversion A.C. motor drive, maintenance-free.
- 3. 304# Stainless steel centrifuging chamber.
- 4. Housing and lid of metal finished in a scratch and impact resistant coating.
- 5. Aluminium alloy fixed angle rotor, stainless steel swing out rotor.
- 6. Rotors and buckets are autoclavable and corrosion-free.
- 7. Durable chassis with steel armored chamber and steel layered lid.
- 8. Smooth tube insertion and removal facilitated by precisely carved holes in rotors and buckets.
- 9. User friendly
- 10. LCD/TFT display panel for optional, and highly visible display screen.
- 11. CFC-free refrigerant.
- 12. RTC (Real-Time Control) Function
- 13. PID dynamic temperature control.
- 14. Temperature range from -20°C to 40°C in 1°C steps.
- 15. Reversible parameters during operation
- 16. Up to 30 program memory and easily retrieved.
- 17. Last set parameters recall(useful for repetitive analysis)
- 18. Adjustable Accel/Decel, 10 acceleration and 10 deceleration ramps.
- 19. Automatic lid-locking and holding during rotor run.
- 20. Viewing port in the lid for speed calibration and noise measurement.
- 21. Automatic RFID rotor identification with over-speed protection.
- 22. Active imbalance detection and shutdown.
- 23. Safety lid interlock to prevent lid opening during centrifugation
- 24. Lid drop protected construction and fine control of lid opening.
- 25. Emergency door lock release enables opening in case of power failure or sudden stoppages.
- 26. Safety and Standards Certification: CE
- 27. Product Safety: EN61010-1 and EN 61010-2-020 Electromagnetic Compatibility: EN 61326-1.



**MODEL NO DS-200R** 0-20000rpm adjustable Speed range(rpm) Max Capacity(ml) 4\*750ml RCF range (xg) 0-28174xg adjustable Temperature control range  $-20^\circ\!\mathrm{C}\!\sim\!+40^\circ\!\mathrm{C}$ Noise(dBA) ≦58dB(A) R404A Refrigerant Dimension(mm) 680x580x420mm(LxWxH) Time range 1-99minutes 59s adjustable Speed accuracy  $\pm 10 r/min$ ACC/DEC 1-10 rates Temperature control accuracy  $\pm 1^{\circ} C$ 110KGS Net weight(without rotor) Power supply AC220V,50HZ,10A,1300W

No.	ltem	Max. capacity	Max.spe ed	Max.RCF	Note
NO.1	Angle rotor	12x1.5/2.2ml			PP/PC tube
	Adapter	12x0.5ml	20000r/ min	28174xg	
	v	12x0.2ml			
NO.2	Angle rotor	12x5ml			PP/PC tube
	Adapter	12x1.5ml	17000r/ min	20680xg	PP/PC tube
NO.3	Angle rotor	24x1.5/2.2ml			
	Adapter	24x0.5ml	16000r/ min	24041xg	PP/PC tube
		24x0.2ml			
NO.4	Angle rotor	10x15ml			
	Adapter	10x10ml			
	Û	10x5ml	15000r/ min	26161xg	PP/PC tube
	Adapter	10x1.5ml			
N0.5	Angle rotor	48×1.5/2.2ml			
<b>@</b> •	Adapter	48x0.5ml	1500 0r/min	23394xg	PP/PC tube
		48x0.2ml			



NO.6	Angle rotor	12×10ml				
	Adapter	12×5ml				
	Ũ	12x1.5ml	15000r/min	21130xg	PP/PC tube	
NO.7	Angle rotor	6×50ml				
	Adapter	6×15ml				
R	Ũ	6×10ml		21255		
	Adapter	6×1.5ml	– 14000r/min	21255xg	PP/PC tube	
NO.8	Angle rotor	6×100ml				
	Adapter	6×50ml	]			
		6×15ml	11000r/min	14610xg	PP/PC tube	
		6×10ml				
		6×5ml				
		6×1.5ml				
NO.9	Angle rotor	8×50ml		17226xg	PP/PC tube	
	Adapter	8×15ml				
	Ũ	8×10ml	12000r/min			
	Adapter	8×1.5ml		1, 520, 49		
NO.10	Swing	4×250ml			Round cup	
	bucket Adapter	4×9x5/2ml	1			
	633	4×5x15/10ml				
		4×50ml	4000r/min	7040×2		
		4×100ml	40001/11/1	3049xg	PP/PC tube	
	Adapter	4×9x1.5ml				
NO.11	Swing bucket	4×400ml			Square cup	
	Adapter	4×16x5/2ml	]			
		4×9x15/10ml	4000r/min	3049xg		
	0000	4×4x50ml		зочэхд	PP/PC tube	
		4×100ml				





NO.12	Swing bucket	4×500ml			Round cup
	Adapter	4×17x5/2ml		3354xg	
	670	4×8x15/10ml	4000r/min		PP/PC tube
E.P.	A835	4×3x50ml			FF/FC lube
		4×100ml			
NO.13	Swing bucket	4×600ml			Square cup
	Adapter	4×25x5/2ml			
		4×12x15/10ml			
		4×5x50ml	4000r/min	3354xg	PP/PC tube
		4×4x100ml			
NO.14	Swing bucket	4×750ml			Round cup
	Adapter	4×26x5/2ml			
		4×13x15/10ml			
20		4×5x50ml	4000r/min	3443xg	PP/PC tube
		4×3x100ml			
NO.15	Microplate rotor	2×2×96hole			Square cup
	Adapter	2×32×1.5ml	4200r/min	2860xg	PP/PC tube



### Benchtop|Low Speed |Ventilated |Centrifuge DS-40T

#### • 0

#### **Product Overview**

Adaptability: Versatile fixed-angle rotors catering to various needs. Flexible Tube Capacity: Accommodates tubes from 2 ml to 50 ml effortlessly. Powerful RCF: Achieves an RCF of over 2,680 x g for precise separations. Wide Application Range: From clinical diagnostics to academia and industrial sectors.

Trusted Performance: Embraced by professionals and researchers globally.

#### • 0

- 1. Versatility and Precision in One:
- 2. Explore unparalleled versatility with our Benchtop Centrifuge DS-40T. Tailored for various applications, it comes with a wide array of fixed-angle rotors, ensuring adaptability to your specific needs.
- 3. Accommodating Various Tube Sizes:
- 4. Equipped with a diverse selection of accessories, this centrifuge effortlessly accommodates tubes ranging from 2 ml to 50 ml. No matter your sample volume, rest assured, it's handled with precision.
- 5. High RCF for Comprehensive Applications:
- 6. With a maximum Relative Centrifugal Force (RCF) exceeding 2,680 x g, our DS-40T centrifuge is ideal for a myriad of fields. From clinical diagnostics to veterinary medicine, pharmaceuticals, environmental analysis, and industrial production, it delivers consistent, high-quality results.
- 7. Trusted Across Industries and Academia:
- 8. Embraced by esteemed universities and research facilities, this centrifuge is a hallmark of reliability and efficiency. Its robust performance ensures it meets the demands of diverse research environments.

MODEL NO	DS-40T
Speed range(rpm)	0-4000rpm adjustable
Max Capacity(ml)	6*50ml
Noise(dBA)	≦55dB(A)
Dimension(mm)	430x320x250mm
Power supply	AC220V,50HZ,10A,60W
Speed accuracy	±10rpm
RCF range (xg)	0-2268xg adjustable
Time range	1-99minutes adjustable
Net weight(without rotor)	18KGS

No.	Rotor	Capacit y	Max.s peed	Max.R CF	Note
NO.1	Angle rotor	24×10/ 5ml			
	Adapter	24×2ml	4000r	2268x	PP/PC tube / Vacuum blood
an 8.00 m	Adapter	24×1.5 ml	/min	g	collection tubes
NO.2	Angle rotor	6×50ml			
	Adapter	6×15/1 Oml 4000		2268x	PP/PC tube
		6×5ml	/min	g	





## BenchtoplLow speed Ventilated Centrifuge DS-50X



#### **Product Overview**

The DS-50X benchtop centrifuge seamlessly integrates cutting-edge technology with an impressive capacity. Equipped with a variety of swing-out and fixed-angle rotors, it accommodates tubes ranging from 15ml and 50ml to vacuum blood collection tubes. Its extensive accessory range caters to tubes and flasks from 2ml to 100ml, ensuring adaptability for diverse laboratory needs.

Perfect for Varied Applications:

With a maximum Relative Centrifugal Force (RCF) of 3354 x g, the DS-50X stands ready for a multitude of applications. From clinical diagnostics and veterinary medicine to

pharmaceuticals, environmental analysis, and industrial production, this centrifuge excels. It's also the ideal choice for universities and research facilities, offering unparalleled efficiency and reliability in every spin.



#### • 0

- 1. Durable Construction: Its metal housing, metal lid, and 304# stainless steel centrifuge chamber can endure autoclaving and resist detergents and disinfectants.
- 2. Advanced Control: Powered by a microprocessor with frequency conversion A.C. motor drive, ensuring precision and efficiency.
- 3. Intuitive LED Display: The LED screen showcases Speed, Timer, RCF, Rotors, Program (Memory), Acceleration & Deceleration settings, and Error codes, enhancing operational clarity.
- 4. Effective Sealing: Equipped with double-layer sealing rings on the lid and instrument, ensuring prolonged and secure sealing.
- 5. User-Friendly Interface: The machine boasts an intuitive control panel; a detailed view is displayed for ease of operation.
- 6. Programmable Convenience: Offers programmable storage for up to 30 programs, accessible with a single keystroke even after the machine is switched off, ensuring ease of use.
- 7. Optimal Performance: With 10 acceleration rates and 10 braking ramps, it prevents secondary sedimentation, ensuring superior centrifugation results.
- 8. Automatic Lid-Locking: Ensures the lid remains securely locked during rotor operation.
- 9. Rotor Flexibility: Easily exchangeable rotors enhance adaptability for varied applications.
- 10. Error Detection: Automatic troubleshooting with on-screen error code indication and alarms.
- 11. Noise Control: Utilizes patented "Mute" technology, maintaining noise levels below 55 decibels at maximum speed.
- 12. International Safety Standards: Manufactured in adherence to international safety standards like IEC 61010.
- 13. Emergency Protocols: Features electrical lid interlock, preventing lid opening while the rotor is active, and an emergency lid-lock release during power failures.
- 14. Gas Hinge: Incorporates a gas hinge for added safety during lid drop.
- 15. Over Speed Protection: Safety protocols are integrated to prevent over-speed scenarios, ensuring user-machine safety.
- 16. A Centrifuge You Can Trust:
- 17. Experience seamless operation, advanced features, and unmatched safety with our state-of-the-art centrifuge. Designed for precision, reliability, and user convenience, it stands as your trustworthy laboratory companion.

MODEL NO	DS-50x		
Speed range(rpm)	0-5000rpm adjustable		
Max Capacity(ml)	4*100ml		
Display	LCD		
Noise(dBA)	≦55dB(A)		
Dimension(mm)	500x400x300mm		
Net weight(without rotor)	25KGS		
Speed accuracy	±10rpm		
RCF range (xg)	0-3354xg adjustable		
Time range	1s-99minutes		
Acceleration /Deceleration rates	09		
Motor	Frequency Converter motor		
Power supply	AC220V,50HZ,10A,320W		



### Benchtop | Low speed |Ventilated | Centrifuge DS-60X



The DS-60X integrates advanced technology for precise and efficient centrifugation processes.

Versatile Rotor Options: Equipped with a variety of fixed-angle rotors and diverse adapters, accommodating tubes and flasks ranging from 2 ml to 50 ml, providing unparalleled versatility.

Wide Application Range: ideal for applications across clinical diagnostics, veterinary medicine, pharmaceutics, environmental analysis, and industrial production, as well as in universities and research facilities. Experience unparalleled performance and versatility with the DS-60X Benchtop Centrifuge, your ultimate solution for a myriad of laboratory needs.



#### • 0

- 1. Space-Saving Design: Compact and portable, it maximizes your lab space while ensuring high performance.
- Intelligent Control: Equipped with a microprocessor and frequency conversion A.C. motor drive, it offers accurate control over Speed, Timer, RCF, Rotors, Program(Memory), Acceleration & Deceleration, and provides real-time Error code information on its LED Display.
- 3. Quiet Operation: Utilizing innovative "Mute" patent technology, it operates at a noise level lower than 55 decibels even at its highest rotational speed, ensuring a peaceful lab environment.
- 4. Customized Functionality: Tailor your experiments with ease. It offers three levels of damping systems, ten Lifting and lowering speed curves, and the ability to store and recall 30 self-defined operating procedures, meeting diverse experimental needs.
- 5. Robust Construction: Built with a metal housing, metal lid, and a 304# stainless steel centrifuge chamber, it's autoclave-able and resistant to detergents and disinfection liquids, ensuring durability and longevity.
- 6. Enhanced Safety: It comes with multi-level safety features, including over-speed and over-temperature protection, electronic safety door lock, and an emergency lid-lock release in case of power failure, guaranteeing both user and machine safety.

MODEL NO	DS-60X		
Speed range(rpm)	0-6000rpm adjustable		
Max Capacity(ml)	24*15ml		
Display	LED		
Noise(dBA)	≦55dB(A)		
Dimension(mm)	420x320x240mm		
Net weight(without rotor)	18KGS		
Speed accuracy	±10rpm		
RCF range (xg)	0-4588xg adjustable		
Time range	1s-99minutes		
Acceleration /Deceleration rates	09		
Motor	Frequency Converter motor		
Power supply	AC220V,50HZ,10A,170W		



No.	ltem	Capacity	Max. rotational speed	Max. RCF	Note
NO.1	Angle rotor	12 $ imes$ 5-10-15ml			PC/PP tube
	Adapter	12×2ml	6000r/min	4588xg	Vacuum blood collection tubes
NO.2	Angle rotor	6×50ml			PC/PP tube bottom
	Adapter				PC/PP tube
	•	6×15/10ml	5000r/min	3354xg	Vacuum blood
		6×5ml			collection tubes
NO.3	Angle rotor	18 $ imes$ 5-10ml			PC/PP tube/Vacuum blood collection tubes
	Adapter	18×2ml	4500r/min	2717xg	Vacuum blood collection tubes
NO.4	Angle rotor	24 $ imes$ 15ml			PC/PP tube/Vacuum blood collection
	Adapter	24×2ml	4000r/min	2160xg	tubes Vacuum blood collection tubes



00:00

DARSUN

## Benchtop|Low Speed |Ventilated |Centrifuge

### DS-4

#### • O Product Overview

Our low-speed centrifuge DS-4 combines a small footprint with lightweight design, ensuring effortless operation and minimal noise. Ideal for small-volume separation tasks, it stands as the top choice for hospitals, research institutes, and universities of all levels. Specifically tailored for cosmetic surgery hospitals, beauty salons, health centers, and more, it guarantees efficient and precise results every time.

#### • 0

- 1. 1. Advanced Design for Seamless Performance:
- 2. Crafted with a coated ABS plastic exterior and a robust 304# stainless steel centrifuge chamber, our centrifuge guarantees durability and resilience against disinfectants and detergents. The aluminum alloy rotor ensures optimal performance.
- 3. 2. User-Friendly Interface and Convenient Features:
- 4. Featuring an intuitive observation window for speed calibration and noise measurement, the microprocessor control, driven by a maintenance-free brushless DC motor, ensures seamless operation. The digital display showcases key Aparameters such as Speed, Timer, and RCF. Compact and lightweight, the high-strength ABS structure enhances durability and ease of mobility.
- 5. 3. Efficient Operation with Smart Technology:
- 6. Automatic lid-locking and secure rotor exchange simplify usage, while real-time conversion between r/min and RCF ensures precise results. The machine's intelligent system automatically troubleshoots, displaying error codes and alarms on the screen. Our patented "Mute" technology maintains a noise level below 55 decibels even at the highest rotational speed.
- 7. 4. Ensured Safety Compliance:
- 8. Designed in accordance with international safety standards like IEC 61010, the centrifuge incorporates safety features such as electrical lid interlock, preventing operation when the rotor is running or the lid is open. In case of power failure, the emergency lid-lock release ensures safety. Additionally, gas hinges protect against lid drops, and built-in protections prevent over speeding, prioritizing user safety.

MODEL NO	DS-4
Speed range(rpm)	0-4000rpm adjustable
Max Capacity(ml)	8*15ml
Noise(dBA)	≦55dB(A)
Dimension(mm)	310x270x205mm
Power supply	AC220V,50HZ,10A,60W
Speed accuracy	±10rpm
RCF range (xg)	0-2100xg adjustable
Timerange	0-99minutes adjustable
Net weight(without rotor)	7KGS

No.	Rotor	Capacity	Max. speed	Max. RCF	Note
NO. 1	Angle rotor	8×15/10/5 ml			Blood collection
2003	Adapt		4000r/	1900	tube/PP/PC tube
· <b>&gt;-</b>		8×2ml	nl min	xg	Blood collection tube
NO. 2	Angle Rotor	12×5ml			Blood collection
C.	Adapt		4000r/	2100	tube
777		12×2ml	min	xg	Blood collection tube



### Benchtop|Low Speed |Ventilated |Centrifuge DS-Z4-WS

#### • O Product Overview

Adaptable Rotors: Multiple fixed-angle rotors for versatile applications.

Flexible Tube Compatibility: Accommodates tubes from 2 ml to 50 ml seamlessly.

Clinical Precision: Ensures accurate separation for clinical and beauty applications.

Trusted Across Fields: Widely used in hospitals, beauty salons, and dental practices.

Experience the reliability and precision of DS-Z4-WS. Where versatility meets accuracy, your lab work finds its perfect partner.

#### • 0

- 1. Versatility Redefined:
- 2. Meet the Benchtop Centrifuge DS-Z4-WS your versatile lab companion. Equipped with a variety of fixedangle rotors, it adapts seamlessly to your diverse needs.
- 3. Accommodating Every Sample:
- 4. Its wide range of accessories ensures a perfect fit for tubes spanning from 2 ml to 50 ml. Whether you're handling blood samples in clinical tests, operating in hospital laboratories, or even in beauty salons and dental hospitals, DS-Z4-WS delivers consistent results.
- 5. Precision Where it Matters:
- 6. In clinical tests, the accuracy of your results is paramount. DS-Z4-WS ensures precise separation, guaranteeing the integrity of your samples and the reliability of your analyses.
- 7. Across Industries, Trusted Performance:
- 8. From hospitals and clinical setups to beauty salons and dental practices, DS-Z4-WS is trusted for its reliable performance. Its robust design and efficient operation make it the go-to choice for professionals across diverse fields.

MODEL NO	DS-Z4-WS
Speed range(rpm)	0-4000rpm adjustable
Max Capacity(ml)	12*20ml
Noise(dBA)	≦55dB(A)
Dimension(mm)	430x320x250mm
Power supply	AC220V,50HZ,10A,60W
Speed accuracy	±10rpm
RCF range (xg)	0-2680xg adjustable
Time range	1min-99min adjustable
Net weight(without rotor)	18KGS





No.	Rotor	Capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12×10/5ml			PP/PC tube / Vacuum blood collection tubes
	Adapter	12×2ml	4000r/min	2680xg	Vacuum blood collection tubes
NO.2	Angle rotor	12×20/5ml			Vacuum blood collection tubes
	Adapter	12×2ml	4000r/min	2680xg	Vacuum blood collection tubes
NO.3	Angle rotor	18×10/5ml			PP/PCtube/Vacuum blood collection tubes
	Adapter	pter 18×2ml			Vacuum blood collection tubes
	Adapter	18×1.5ml	4000r/min	2680xg	PP/PCtube
NO.4	Angle rotor	4×50ml			PP/PCtube
	Adapter	4×15/10ml	4000r/min	n 2680xg	Vacuum blood collection tubes
	•	4×5/2ml			Vacuum blood collection tubes



### Benchtop|Low Speed |Ventilated |Centrifuge DS-Z5-WS

#### • 0

#### **Product Overview**

DS-Z5-WS Benchtop Centrifuge, a fusion of cutting-edge technology and exceptional capacity. It comes equipped with a variety of swingout and fixed-angle rotors, complemented by an array of buckets and adapters, accommodating tubes and flasks ranging from 2 ml to 400 ml, including microtiter and deepwell plates.

Wide Compatibility: With its versatile accessories, it seamlessly caters to applications in clinical diagnostics, veterinary medicine, pharmaceutics, environmental analysis, and industrial production. It's also ideal for use in universities and research facilities.

Powerful Centrifugal Force: Achieves a maximum Relative Centrifugal Force (RCF) exceeding 4752xg, ensuring efficient separation and processing across a multitude of samples.



#### • 0

- 1. Robust Construction: Crafted from high-quality steel, including a blast-proof steel chamber and autoclave-able 304# stainless steel, ensuring durability and resistance to disinfectants.
- 2. Precision Control: Microprocessor-controlled with a frequency conversion A.C. motor drive, offering accurate and efficient centrifugation processes.
- 3. Intuitive Interface: The LED display showcases vital parameters, including Speed, Timer, RCF, Rotors, Program (Memory), Acceleration & Deceleration details, and Error Codes, enhancing operational clarity.
- 4. User-Friendly Design: Featuring a dual-layer sealing ring for enhanced lid and instrument sealing, alongside programmable memory storing up to 30 programs. Adapters ranging from 0.5 ml to 500 ml provide versatile usage.
- 5. Efficient Operation: Offers 10 acceleration rates and 10 braking ramps to prevent secondary sedimentation, ensuring superior centrifugation results.
- Safety First: Complies with international safety regulations (e.g., IEC 61010). Equipped with electrical lid interlock, automatic lid-locking during rotor run, emergency lid-lock release during power failure, and a gas hinge for lid drop protection.
- 7. Reliable Performance: Boasts automatic troubleshooting capabilities, displaying error codes and alarms on the screen. Operates quietly, generating noise levels below 58 decibels even at maximum rotational speed.

MODEL NO	DS-Z5-WS		
Speed range(rpm)	0-6000rpm adjustable		
Max Capacity(ml)	4*400ml		
Display	LCD		
Noise(dBA)	≦58dB(A)		
Dimension(mm)	600x440x360mm		
Net weight(without rotor)	40KGS		
Speed accuracy	±10rpm		
RCF range (xg)	0-4752xg adjustable		
Time range	1min-99minutes		
Acceleration /Deceleration rates	1 10		
Motor	Frequency Converter motor		
Power supply	AC220V,50HZ,10A,570W		



No.	ltem	Capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12×5-10-15ml			
	Adapter	12×2ml	6000r/min	4588xg	PP/PCtube
NO.2	Swing rotor	Steel frame rotor			
	Swing frame	4×100ml			PP/PCtube
	Adapter	4×15/10ml	5000r/min	4752×g	PP/PCtube
	Swing frame	4×50ml	5000r/min	4752Xg	PP/PCtube
	Adapter	4×15/10ml			PP/PCtube
NO.3	Swing rotor	Steel frame rotor			
	Swing frame	4×2×100ml			PP/PCtube
	Adapter	4×2×15/10ml			PP/PCtube
	Swing frame	4×2×50ml	4000r/min	3041xg	PP/PCtube
	Adapter	4×2×15/10ml			PP/PCtube
	Swing frame	4×8×15/10/5 ml			PP/PC/Vacuum blood collection tubes
	Rack	4×12×5/2ml	4000r/min	3041 xg	Vacuum blood collection tubes





NO.4	Swing rotor	4×18×2/5ml	4000r/min	2773xg	Vacuum blood collection tubes
NO.5	Swing bucket	4×400ml			Square bucket
	Adapter	4×16×5/2ml 4×9×15/10ml			Vacuum blood collection tubes
		4×4×50ml	4000r/min	3049xg	
		4×100ml			PP/PCtube
NO.6	Swing bucket	4×250ml			Round bucket
	Adapter	4×9×5/2ml	4000r/min	000r/min 3049xg	Vacuum blood collection tubes
	*	4×5×15/10ml			
		4×50ml			
		4×100ml			PP/PCtube
		4×9×1.5ml			
NO.7	Microplate rotor	2×2×96 hole			Square bucket
	Adapter	2×32×1.5ml	4200r/min	2860xg	PP/PCtube



### Bench top | Low Speed |Ventilated |Centrifuge DS-6B

#### • 0

#### **Product Overview**

Our versatile benchtop centrifuge DS-6B, designed to meet a myriad of laboratory needs. Equipped with a diverse selection of swing-out and fixed-angle rotors, along with various buckets and adapters, this centrifuge offers unparalleled flexibility



#### 0

- 1. Rotors and Accessories: Accompanied by a wide array of rotors, buckets, and adapters, catering to tubes, flasks from 0.5 ml to 750 ml, as well as microtiter and deepwell plates.
- 2. Optimal Capacity: this centrifuge excels in multiple fields including clinical diagnostics, veterinary medicine, pharmaceutics, environmental analysis, and industrial production.
- 3. Versatile Applications: Ideal for universities and research facilities, it seamlessly integrates into various research projects, ensuring precise and reliable results.
- 4. Experience unmatched versatility and performance in your lab with the DS-6B centrifuge. Tailored for a wide range of applications, it's your trusted partner in scientific exploration.
- 5. Program Management: Programmable and storable, it can save up to 30 programs, accessible with a single keystroke even after the centrifugation cycle ends.
- 6. Acceleration and Braking Control: Offers 10 acceleration rates and 10 braking ramp settings, preventing secondary sedimentation and enhancing centrifugation efficiency.
- 7. Automatic Lid Security: The centrifuge features automatic lid-locking and holding during rotor operation, ensuring user safety.
- 8. Rotor Versatility: Easily exchangeable rotors allow for seamless adaptation to different sample types and sizes.
- 9. Intelligent Troubleshooting: Automatic troubleshooting with error code indication and alarms on the screen simplifies issue resolution.
- 10. Quiet Operation: Operating at a noise level below 58 decibels even at the highest rotational speed, it ensures a peaceful laboratory environment.
- 11. Robust Construction: Crafted from high-quality steel and featuring a blast-proof steel chamber, along with an autoclave-able 304# stainless steel chamber, it's resistant to detergents and disinfectants.
- 12. Observations Window: The lid boasts an observation window, ensuring easy speed calibration and noise measurement.
- 13. Microprocessor Control: Equipped with a microprocessor and frequency conversion A.C. motor drive for efficient and accurate operations.
- 14. LCD Display: The LCD screen showcases Speed, Timer, RCF, Rotors, Program (Memory), Acceleration & Deceleration details, and provides error code information for seamless monitoring.
- 15. Double Layers Sealing: A double-layer sealing ring ensures a secure seal between the centrifuge lid and the instrument, maintaining optimal conditions.
- 16. Vibration Control: Six levels of damping technology mitigate vibrations, ensuring the best centrifugal effect. Adapters from 0.5 ml to 500 ml are available.



### Benchtop | Low Speed | Ventilated | Centrifuge

### DS-6B

MODEL NO	DS-6B
Speed range(rpm)	0-6000rpm adjustable
Max Capacity(ml)	4*750ml
Display	7″LCD
Noise(dBA)	≦58dB(A)
Dimension(mm)	600x470x370mm
Speed accuracy	±10rpm
RCF range (xg)	0-4752xg adjustable
Time range	1s-99minutes adjustable
Acceleration /Deceleration rates	1 10
Motor	Frequency Converter motor
Power supply	AC220V,50HZ,10A,770W
Net weight(without rotor)	50KGS

No.	Rotor	Capacity	Max. speed	Max.RCF	Note
NO.1	Angle rotor	12×15ml-10ml-5ml			
	Adapter	12×2ml	6000r/min	4588xg	PP/PCtube
NO.2	Swing rotor	Steel frame rotor			
	Swing frame	4×100ml			PP/PCtube
	Adapter	4×15/10ml			PP/PCtube
	Swing frame	4×50ml	5000r/min 4752xg	PP/PCtube	
	Adapter	4×15/10ml			PP/PCtube



NO.3	Swingrotor	Steel frame rotor			PP/PCtube
	Swing frame				FFFClube
	11	4×2×100ml			PP/PC tube
	Adapter	4×2×15/10ml			PP/PC tube
	Swing frame	4×2×50ml			PP/PC tube
	Adapter	4×2×15/10ml	4000r/min	3041xg	PP/PC/tube/vacuum blood collection tube
	Swing frame	4×8×15/10/5ml			PP/PC tube/vacuum blood collection tube
	Rack	4×12×5/2ml			vacuum blood collection tube
NO.4	Swing bucket	4×18×5/2ml	4000r/min	2773xg	Vacuumblood collection tube
NO.5	Swing bucket	4×600ml	4000r/min	3354xg	Square cup
	Adapter	4×25×5/2ml			vacuum blood collection tube
		4×12×15/10ml 4×5×50ml			PP/PC tube
		4×4×100ml			
NO.6	Swing bucket	4×500ml	4000r/mi n	3354xg	Round cup
	Adapter	4×17×5/2ml			vacuum blood
		4×8×15/10ml			collection tube
		4×3×50ml			PP/PC tube
		4×100ml 4×750ml			Round cup
NO.7	Swing bucket Adapter	4×26×5/2ml	4000r/mi n	3443xg	vacuum blood
		4×26×5/2001			collection tube
		4×5×50ml			
		4×3×100ml			PP/PCtube
NO.8	Microplate rotor	2×2×96hole	4000r/mi n	2860xg	Square cup
	Adapter	2×32×1.5ml			PP/PCtube
NO.9	Swingrotor	6×2×30ml	4500r/mi n	3170xg	Suitablefor liquid- based cell adsorbent sandwich cup



### Benchtop | LowSpeed | Refrigerated | Centrifuge DS-L-60R

#### • 0

Product Overview

Equipped with a 4x100ml horizontal rotor, compatible with adapters for nucleic acid centrifuge tubes, vacuum blood collection tubes.
External USB interface for tracking over 1000 sets of centrifuge data.
Fixed angle rotor, Swing out rotor available

#### • 0

#### **Product Features**

#### 1. User friendly:

- 2. CFC free refrigeration system, Pre-cooling feature, Precise temperature control up to -9°C.
- 3. Programmable and storable, stores up to 1000 programs and provides direct user access with one keystroke save. The stored parameter: combination remains in the memory even after the centrifugation has been switched off.
- 4. Automatic lid-locking and holding during rotor run.
- 5. Easily exchangeable rotors.
- 6. Automatic troubleshooting with indication of error code and alarm on the screen.
- 7. The highest speed operation noise is less than 50 decibels.
- 8. Safety:
- 9. Produced according to international safety regulations (e.g. IEC 61010)
- 10. Safety Electrical lid interlock, door can not open when rotor is running and machine won't run when lid open and error code appears.
- 11. Emergency lid-lock release when power failure.
- 12. Gas hinge for lid drop protection.
- 13. Safety protections are made for the over speed, over heating(motor, chamber), imbalance etc to ensure the man machine safety.
- 14. Blood collection trolleys or houses may be used by a variety of personnel, so micro centrifuge DS-L-60R designed for this purpose are typically fast and efficient, with high spin speeds and short cycle times, easy to use and intuitive.
- 15. It has pre-programmed settings that make it easy to spin the blood correctly. It process blood quickly to ensure that it remains viable for medical use.

#### 16. Design:

- 17. Metal housing, metal lid, and stainless steel centrifuge chamber are autoclave-able and resistant detergents and disinfection liquids.
- 18. Observations window on lid for speed calibration and noise measurement.
- 19. Microprocessor control with frequency conversion A.C. motor drive.
- 20. Adopt high efficiency environmental protection refrigeration system, no environmental pollution, high precision temperature control.
- 21. Touch five-inch colour screen display all parameters of the instrument operation, the user can set the centrifugal speed and centrifugal time arbitrarily.
- 22. Centrifuge operating system with a password to prevent misuse, external USB interface, can track and trace more than 1000 sets of centrifugal data.
- 23. Light weight, small size, simple, beautiful and generous appearance, unique suction cup feet can firmly grasp the placement surface, even when driving without worrying about centrifuge movement.
- 24. Four suction cup feet can be adjusted high and low, while the centrifuge built-in level, blood collection vehicle in the case of uneven ground can still adjust the centrifuge to a stable state of use, the best centrifugal effect, the use of safer.
- 25. Equipped with 4 x 100ml horizontal rotor, optional nucleic acid centrifuge tubes, vacuum blood collection tubes, 15ml, 10ml, 8ml, 5ml, 2ml and other centrifuge tube adapters.



MODELNO	DS-L-60R
Speed range(rpm)	0-6000rpm adjustable
Max Capacity(ml)	4*100ml
RCF range (xg)	0-4860xg adjustable
Temperature control range	-9°C∼+40°C
Noise(dBA)	50dB(A)
Refrigerant	A134
Dimension(mm)	580x350x370mm(LxWxH)
Time range	1s-99minutesadjustable
Speed accuracy	±10r/min
ACC/DEC	1-10 rates
Temperature control accuracy	±1°C
Net weight(without rotor)	42KGS
Power supply	AC220V,50HZ,10A, 320W

NO.1	Angle rotor	24x15/10/5ml			PP/PC tube
	Adapter	24x2ml	6000r/min	4860xg	PP/PC tube
NO.2	Swingrotor	steel frame rotor			PP/PC tube
	Swing frame	4x100ml	5000r/min	3437xg	TT / C tube
	Adapter	4x5x5ml			PP/PC tube
	Adapter	4x4x8/10ml			PP/PC tube



## Benchtop|Low Speed |Refrigerated |Centrifuge DS-L-5M

#### • 0

**Product Overview** 

Our DS-L-5M low speed refrigerated centrifuge stands as the epitome of precision in scientific research and medical laboratories. Specifically engineered to separate substances of varying densities within a sample, this centrifuge guarantees accuracy and reliability in every use.

The integrated refrigeration feature enables meticulous temperature control throughout the separation process. This temperature stability is vital for preserving the integrity of delicate samples, ensuring your results are always accurate.

Trusted by professionals in scientific research and medical laboratories, the DS-L-5M ensures the seamless separation of substances, allowing for indepth analyses and reliable outcomes.

DS-L-5M is designed to handle a diverse range of samples, this centrifuge accommodates various densities, making it indispensable in fields such as biochemistry, clinical research, and pharmaceutical studies.

Upgrade your laboratory capabilities with the DS-6-L low speed refrigerated centrifuge where precision meets reliability, ensuring your scientific endeavors yield the most accurate results.



#### • 0

#### **Product Features**

- 1. Innovative Design:
- 2. Robust Construction: Crafted with a metal housing, metal lid, and a stainless steel centrifuge chamber, our centrifuge is both autoclave-able and resistant to a variety of detergents and disinfection liquids, guaranteeing longevity and resilience.
- 3. Precision Control: The microprocessor control, powered by a frequency conversion A.C. motor drive, ensures precise and consistent operation, elevating the reliability of your experiments.
- 4. Intuitive Interface: Featuring an LCD display, our centrifuge provides real-time parameters, including Speed, Timer, RCF, Rotors, Program (Memory), Acceleration & Deceleration information, and Error codes. Its userfriendly interface enhances your operational experience.

#### 5. Efficiency and Adaptability:

- 6. Customized Programming: With the ability to store up to 30 programs, our centrifuge offers programmable settings. These stored combinations remain intact even after the machine has been switched off, ensuring seamless continuity in your experiments.
- 7. Adaptable Rotors: Easily exchangeable rotors, coupled with a special rotor connector for effortless loading and unloading, enhance the adaptability of our centrifuge for a wide range of applications.
- 8. Quiet Operation: Our centrifuge employs "Mute" patent technology, ensuring a noise level lower than 58 decibels at its highest rotational speed. Experience the efficiency without the disturbance.

#### 9. Enhanced Safety Features:

- 10. Fail-Safe Mechanisms: Designed in adherence to international safety regulations, including IEC 61010, our centrifuge incorporates a safety electrical lid interlock. The machine won't run when the lid is open, preventing accidents and ensuring user safety.
- 11. Emergency Measures: In case of a power failure, an emergency lid-lock release engages, providing a swift response during unexpected interruptions. Additionally, a gas hinge protects against accidental lid drops, enhancing overall safety.
- 12. Rotor Safeguards: Safety protections extend to preventing over-speeding, over-heating of the motor and chamber, as well as imbalance issues, guaranteeing both the user and the machine's safety.



MODEL NO	DS-L-5M
Speed range(rpm)	0-6000rpm adjustable
Max Capacity(ml)	4*750ml
RCF range (xg)	0-4752xg adjustable
Temperature control range	-20°C~+40°C
Noise(dBA)	≦58dB(A)
Refrigerant	R404A
Dimension(mm)	670x730x400mm(LxWxH)
Time range	1-99minutes 59s adjustable
Speed accuracy	±10r/min
ACC/DEC	1-10 rates
Temperature control accuracy	±1°C
Power supply	AC220V,50HZ,10A,1300W
Net weight(without rotor)	100KGS

No.	ltem	Max. capacity	Max.sp eed	Max.RCF	Note
NO.1	Angle rotor	12x15/10/5ml			PP/PC tube
	Adapter		6000r/	4588xg	
		12x2ml	min	loong	PP/PC tube
NO.2	Swing rotor	steel frame rotor			
	Swing frame				PP/PC tube
	Ť	4x100ml	PP/PC	PP/PC tube	
-le- l	Adapter	4x15/10ml	5000r/ min 4752xg		PP/PC tube
	Swing frame		1		
	Ť	4x50ml	PP/P		PP/PC tube
	Adapter		1		
	Î	4x15/10ml			PP/PC tube

.



NO.3	Swingrotor	steel frame rotor			
	Swing frame	4x2x100ml			
STARA.	Adapter	4x2x15/10ml			
1975	Swing frame	4x2x50ml			
	Adapter	4x2x15/10ml	4000r/ min	3041xg	PP/PC tube
	Swing frame	4x8x15/10/5ml			
	Rack	4×12×5/2ml			
NO.4	Swingbucket	4×18×2/5ml	4000r/ min	2773xg	Vacuum blood collection tubes
N0.5	Swing bucket	4×600ml			Square cup
	Adapter	4×25×5/2ml		Vacuum t	
	Adapter	4×12×15/10ml	4000r/	3354xg	
		4×5×50ml	min		PP/PC tube
		4×4×100ml			



### **Biosafety Blood Tube Automatic Decapping Centrifuge Benchtop | Low Speed**

# **DS-450**

#### • 0

#### **Product Overview**

DS-450 Large Centrifuge, engineered to redefine safety standards in laboratories. Designed as a bio-safety centrifuge, it incorporates advanced features ensuring both sample integrity and operator protection during operations.



#### • 0

- 1. Bio-Safety Assurance: The DS-450 is purposefully crafted with robust bio-safety features. It provides a secure environment for handling sensitive biological samples, safeguarding against contamination and ensuring the integrity of experiments.
- 2. Ultraviolet Sterilization: Equipped with a built-in ultraviolet sterilization lamp, this centrifuge utilizes UV technology to sterilize the chamber thoroughly. This process eliminates the risk of sample contamination, guaranteeing a sterile environment for experiments.
- 3. Air Tight Swing Bucket Cover: Each swing bucket features a separate air-tight cover. This meticulous design prevents any leaks or spills during high-speed centrifugation, maintaining sample integrity and laboratory cleanliness.
- 4. Efficient Aerosols Filtering: The centrifuge boasts an efficient aerosols filtering system. This system captures and filters airborne particles, ensuring a clean and safe laboratory atmosphere while the centrifuge operates at high speeds.
- 5. Operator Protection: Prioritizing operator safety, the DS-450 contains aerosols and filters the air, minimizing the risk of exposure. Researchers can work confidently, knowing they are protected while handling samples.
- 6. Comprehensive Safety: With features such as the aerosols filtering system, ultraviolet sterilization, and airtight covers, the DS-450 ensures comprehensive safety. It creates an ideal environment for experiments, allowing researchers to focus on their work without concerns about contamination or exposure.
- 7. The DS-450 Large Centrifuge is more than just a laboratory instrument; it's a commitment to the highest safety standards. Elevate your research with a centrifuge designed to protect both your samples and your team. Choose the DS-450 for unparalleled bio-safety in your laboratory experiments

MODEL NO	DS-450		
Speed range(rpm)	0-6000rpm adjustable		
Max Capacity(ml)	4*400ml		
RCF range (xg)	0-4588xg adjustable		
Noise(dBA)	≦58dB(A)		
Power supply	AC220V,50HZ,10A,570W		
Time range	1s-99minutesadjustable		
Speed accuracy	±10r/min		
ACC/DEC rates	0-9		
Net weight(without rotor)	40KGS		
Dimension(mm)	580x440x360mm(LxWxH)		

.



No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor Adapter	12x15/10/5ml 12x2ml	6000r/min	4588xg	PP/PC tube
No.2	Swing bucket Adapter	4x300ml 4x12x5/2ml 4x6x15/10ml 4x2x50ml 4x100ml	4000r/min	3050xg	Square bucket
NO.3	Swing bucket Adapter	4x400ml 4x16x5/2ml 4x9x15/10ml	4000r/min 4000r/min	3050xg 3050xg	Square bucket Square bucket
N0.4	Swing bucket Adapter	4×250ml 4×13×5/2ml 4×5×15/10ml 4×2×50ml 4×100ml	4000r/min	3049xg	Round bucket with air tight cover



### Biosafety Blood Tube Automatic Decapping Centrifuge Benchtop | Low Speed

# **DS-540**

#### • 0

#### **Product Overview**

Designed with advanced bio-safety features, the DS-540 Large Centrifuge ensures both operator and sample safety during operations. Equipped with a robust aerosols filtering system, it effectively captures and filters airborne particles, enhancing the laboratory environment



#### • 0

- 1. The Benchtop Centrifuge DS-540 features an A.C. frequency brushless motor with direct drive, ensuring high precision, low noise, and long service life.
- 2. Equipped with microprocessor control and an LCD touchpad display, it allows for easy programming and storage of customized settings.
- 3. Simultaneous display of speed, centrifugal force, and time provides a convenient and efficient user experience.
- 4. Bio-Safety Assurance: The DS-540 is meticulously engineered as a bio-safety centrifuge. Its design incorporates cutting-edge features to prevent contamination and ensure the integrity of biological samples.
- 5. Ultraviolet Sterilization: Fitted with a built-in ultraviolet sterilization lamp, this centrifuge employs UV technology to sterilize the chamber, further minimizing the risk of sample contamination and ensuring a sterile environment.
- 6. Air Tight Swing Bucket Cover: Each swing bucket is equipped with a separate air-tight cover. This ensures that samples are securely contained, preventing any potential leaks or spills during high-speed centrifugation.
- 7. Efficient Aerosols Filtering: The centrifuge incorporates a robust aerosols filtering system. This system effectively captures airborne particles, guaranteeing a clean and safe laboratory atmosphere while the centrifuge operates at high speeds.
- 8. Operator Protection: Not only does the DS-540 safeguard samples, but it also prioritizes operator protection. By containing aerosols and filtering the air, it reduces the risk of exposure, creating a secure environment for laboratory personnel.
- Comprehensive Safety: With its combination of features, including the aerosols filtering system, ultraviolet sterilization, and air-tight covers, the DS-540 provides comprehensive safety. Researchers can conduct experiments with confidence, knowing that both their samples and themselves are protected.
- 10. The DS-540 Large Centrifuge stands as a testament to modern laboratory safety standards. Its innovative design ensures the secure handling of samples while providing a protective environment for researchers. Choose the DS-540 for a seamless blend of safety and efficiency in your laboratory processes.

MODEL NO	DS-540		
Speed range(rpm)	0-6000rpm adjustable		
Max Capacity(ml)	4*600ml		
RCF range (xg)	0-4588xg adjustable		
Noise(dBA)	≦58dB(A)		
Power supply	AC220V,50HZ,10A, 770W		
Time range	1s-99minutes adjustable		
Speed accuracy	±10r/min		
ACC/DEC rates	0-9		
Net weight(without rotor)	50KGS		
Dimension(mm)	600x470x370mm(LxWxH)		



No.	Item				
		Max. capacity	Max. speed	Max.RCF	Note
NO.1	Angle rotor	12x15/10/5ml	_		
	Adapter	12x2ml	6000r/min	4588xg	PP/PC tube
NO.2	Swing bucket	4x600ml			
	Adapter	4x25x5/2ml			
No	-	4x12x15/10ml		3354xg	
		4x5x50ml	4000r/min		Square bucket
		4x4x100ml			
N0.3	Swing bucket	4×500ml			Round bucket with air tight lids
	Adapter	4×24×5/2ml			Round bottom or conical tubes
		4×7×15/10ml	4000r/min	3354xg	Round bottom or conical tubes
		4×4×50ml	_		PP/PC tubes
		4×2×100ml			PP/PC tubes



### Biosafety Blood Tube Automatic Decapping Centrifuge Floor Standing Low Speed

**DS-650** 

• 0

**Product Overview** 

Designed for superior performance, the DS-650 Floor Standing Centrifuge is the pinnacle of large-capacity processing. Tailored to meet the demands of various sectors including blood stations, pharmaceutical factories, biochemistry, and biological products, this centrifuge is the ultimate solution for critical tasks such as blood separation, protein precipitation, and cell collection.



#### • 0

- 1. Exceptional Capacity: Equipped with a large-capacity fixed rotor capable of handling 4\*1000ml volumes, this centrifuge streamlines high-volume processing tasks with ease. Its versatility extends to accommodating swing-out rotors, providing unmatched flexibility for diverse applications.
- 2. Versatile Applications: Widely utilized in blood stations, pharmaceutical factories, biochemistry labs, and biological product facilities, the DS-650 excels in a myriad of applications, from blood processing to intricate biochemical experiments.
- 3. Precision Engineering: Crafted to meet the highest standards, this centrifuge ensures precise and reliable results. Its advanced technology guarantees efficient blood separation, protein precipitation, and cell collection, enhancing the accuracy of experiments and procedures.
- 4. Compliance and Certification: The DS-650 adheres to rigorous quality and safety standards. It proudly bears the CE security certification, and quality certification, underscoring its commitment to operational excellence and user safety.
- 5. User-Friendly Interface: Designed with user convenience in mind, the DS-650 features an intuitive interface that simplifies operation. Its user-friendly controls and informative display enhance the overall user experience, making complex processes manageable.
- 6. Durable Construction: Built to withstand the demands of high-throughput environments, the DS-650 boasts robust construction. Its durability ensures longevity and reliability, making it a long-term asset for any laboratory or facility.
- Experience unmatched performance and reliability with the DS-650 Floor Standing Centrifuge. From large-scale blood separation to intricate biochemical experiments, this centrifuge delivers exceptional results, making it the instrument of choice for professionals across various scientific fields.

MODEL NO	DS-650		
Speed range(rpm)	0-6000rpm adjustable		
Max Capacity(ml)	4*1000ml		
RCF range (xg)	0-4588xg adjustable		
Noise(dBA)	≦55dB(A)		
Power supply	AC220V,50HZ,10A, 1200W		
Speed range(rpm)	0-6000rpm adjustable		
Max Capacity(ml)	4*1000ml		
RCF range (xg)	0-4588xg adjustable		
Noise(dBA)	≦55dB(A)		
Power supply	AC220V,50HZ,10A,1200W		



No.	ltem	Max. capacity	Max.spe ed	Max.RCF	Note
NO.1	Angle rotor	12x15/10/5ml			
	Adapter	12x2ml	6000r/m in	4588xg	PP/PC tube
NO.2	Swing bucket	4x600ml			Square cup with
SE .	Adapter	4x25x5/2ml			wind cover
ad		4x12x15/10ml	4000r/m in	3354xg	Blood collection tubes
		4x5x50ml			
		4x4x100ml			PP/PC tube
N0.3	Swing bucket	4×800ml			Square cup with
	Adapter	4×30×5/2ml			wind cover
		4×12×15/10ml	4000r/m in	3443xg	Blood collection tubes
		4×6×50ml			
		4×4×100ml			PP/PC tube
NO.4	Swing bucket	6×600ml			Square cup with wind cover
	Adapter	6×25×5/2ml			Blood collection tubes
		6×12×15/10ml	4000r/mi n	3400xg	
		6×5×50ml			PP/PC tube
		6×4×100ml			FF/FC tube
NO.5	Swing bucket	4×1000ml			Rhombus cup with wind cover
	Adapter	4×42×5/2ml			Blood collection tubes
		4×18×15/10ml	4000r/mi n	3578xg	
		4×7×50ml			PP/PC tube
		4×4×100ml			
NO.6	Swing bucket	4×750ml			Air tightness cup with wind cover
	Adapter	4×28×5/2ml			Blood collection tubes
		4×9×15/10ml	4000r/mi n	3443xg	
		4×5×50ml			PP/PC tube
		4×3×100ml			



### Floor-Standing|High Speed |Refrigerated |Centrifuge DS-22MC

#### • 0

**Product Overview** 

Floor Standing Refrigerated Centrifuge DS-22MC effortlessly handles significant loads with its 4\*1000ml fixed rotor and versatile swing-out rotor. Widely utilized in animal and plant molecular biology, cell biology, clinical research, bioengineering, large-scale sample preparation, as well as blood and protein precipitation, its applications are as diverse as its capabilities.



#### • 0

- 1. Durable Build: Autoclave-able steel body and stainless steel chamber ensure longevity.
- 2. Precision Control: Microprocessor control and frequency conversion motor drive for accurate performance.
- 3. User-Friendly Interface: Touch color screen displays Speed, Timer, RCF, Rotors, and more.
- 4. Wind Cover Shield: Prevents air currents from affecting specimens during processing.
- 5. Advanced Rotor: Super hard aluminium alloy rotor offers excellent sealing and sterilization resistance.
- 6. Easy Maintenance: Double-layer silicone seal ring in door cover and body.
- 7. Efficient Cooling: CFC-free environmental protection refrigeration system with dual circuit control.
- 8. Programmable: Stores up to 30 programs for easy access and consistency in centrifugation.
- 9. Smooth Operation: 10-speed acceleration and deceleration curves prevent secondary sedimentation.
- 10. Safety Features:
- 11. Automatic Lid-Locking: Ensures the lid remains closed during rotor operation.
- 12. Rotor Locking: Rotor head automatically tightens; incorrect rotor detection enhances safety.
- 13. Emergency Release: Lid-lock releases in case of power failure.
- 14. Protection Systems: Equipped with over speed, over current, and unbalance detection for real-time monitoring.

MODEL NO	DS-22-MC
Max. Speed	22000rpm
Speed accuracy	±10rpm
Max.Capacity	4x1000ml
Max. RCF	53028xg
The refrigerant	R-22
Temp.range(at RT 25°C)	-20°C~40°C
Noise	<60dB(A)
Net weight	250kg
Gross weight	280kg
Power supply	AC220v 50Hz 30A,5kw
Motor	AC frequency conversion motor, direct drive
Screen	Touch LCD color+digital screen
Control	advanced CPU control system
Timer range	1~99h59min
Temp accuracy	±1°C
Acceleration/DecelerationRate	10
Refrigerated	R404A
Dimension	860×730×1200mm(L×W×H)
Packing Size	920×790×1700mm(L×W×H)



No.	Rotor	Capacity	Max.speed	Max. RCF	Note
NO.1	Fixed Angle Rotor	24×1.5ml	22000r/min	53028xg	PP/PCtube
NO.2	Fixed Angle Rotor	16×10ml	21000r/min	52300xg	PP/PCtube
NO.3	Fixed Angle Rotor	12×15ml	18000r/min	36220xg	PP/PCtube
NO.4	Fixed Angle Rotor	6×50ml	20000r/min	43000xg	PP/PCtube
NO.5	Fixed Angle Rotor	6×85ml	15000r/min	25700xg	PP/PCtube
NO.6	Fixed Angle Rotor	4×250ml	14000r/min	30200xg	PP/PCtube
NO.7	Fixed Angle Rotor	6×250ml	12000r/min	22500xg	PP/PCtube
	Adapter	6×50ml			
NO.8	Fixed Angle Rotor	8×100ml	14000r/min	26952xg	PP/PCtube
NO.9	Fixed Angle Rotor	6×500ml	10000r/min	17800xg	PP/PCtube
NO.10	Fixed Angle Rotor	4×1000ml	8000r/min	12000xg	PP/PCtube



# Floor-Standing | High Speed | Refrigerated | Centrifuge

# **DS-10C**

• 0

#### **Product Overview**

•irectly driven by high power AC frequency conversion motor, small vibration, low noise, long service life.

•Adopting imported high-efficiency environmentally friendly refrigeration system, cooling and heating dual-channel control, no environmental pollution, high precision temperature control.

•The use of advanced CPU control system, with 35 operating procedures can be programmed, can be stored, can be taken; the user can set 30 procedures for daily operation.

•Dual screen design parameter display intuitive, at the same time display running speed, centrifugal force, door cover switch, lift speed gear and other parameters, with Chinese and English operating software conversion.

•Equipped with safety designs such as door cover protection, overspeed, overcurrent and advanced electronic uneven quartet detection system, which can monitor the centrifuge process in real time to ensure the safe operation of the instrument.

•The rotor is made of super-hard aluminium alloy by special technology, with good sealing performance and unlimited high temperature and high pressure disinfection resistance.



MODELNO	DS-10C		
Max. Speed	10000rpm		
Speed accuracy	±10rpm		
Max.Capacity	6x1000ml		
Max. RCF	18590xg		
Daily use program	30		
Temp.range(at RT 25°C)	-20°C~40°C		
Noise	< 60dB(A)		
Net weight	270kg		
Power supply	AC220v 50Hz 30A,6500w		
Motor	AC frequency conversion motor, direct drive		
Screen	Touch LCD color+digital screen		
Control	advanced CPU control system		
Timer range	1~99h59min		
Temp accuracy	±1°C		
Acceleration/DecelerationRate	10		
Refrigerant	R404A		
Dimension	860×730×1200mm(L×W×H)		

No.	Rotor	Capacity	Max.speed	Max. RCF	Note
NO.1	Fixed Angle Rotor	6x500ml	10000r/min	18590xg	PP/PCtube
NO.2	Fixed Angle Rotor	6x1000ml	8000r/min	14472xg	PP/PCtube



# Floor-Standing|High Speed |Refrigerated |Centrifuge

## DSK-21R

#### • 0

**Product Features** 

High power AC frequency conversion motor direct drive, high precision, low noise, long service life.

Adopt high-efficiency environmental protection refrigeration system, no environmental pollution, high precision temperature control.

Microcomputer control, colour screen display, programmable and storable, rotational speed, centrifugal force, time can be displayed at the same time.

Vertical high-speed freezing centrifuge, a multi-function machine; both high-speed centrifugation (20000rpm), but also low-speed large-capacity 4x750ml separation.

Six levels of damping shock absorption, centrifugal effect to achieve the best, 10 kinds of speed curve, 30 kinds of free procedures can be programmed and stored to meet different experimental requirements

Door cover, body configuration double silicone sealing ring, sealing performance is particularly good, long-term use does not aging, not deformation

"Mute" patented technology, the highest speed operation is less than 58 dB. According to different experiments can be prepared 0.5-500ml adapter.

Multi-level protection functions such as overspeed, over-temperature, unbalance, electronic safety door lock, etc. ensure the safety of human and machine.

MODEL NO	DSK-21R		
Speed range(rpm)	0-20000rpm adjustable		
Max Capacity(ml)	4*750ml		
RCF range (xg)	0-28620xg adjustable		
Temperature control range	-20°C∼+40°C		
Noise(dBA)	≦58dB(A)		
Refrigerant	R404A		
Power supply	AC220V,50HZ,16A,2150W		
Time range	1-99minutes 59s adjustable		
Speed accuracy	±10r/min		
ACC/DEC	1-10 rates		
Temperature control accuracy	±1°C		
Net weight(without rotor)	190KGS		
Dimension(mm)	700x600x820mm(LxWxH)		





	Rotor				
No.		Max. capacity	Max.speed	Max.RCF	Note
NO.1	Anglerotor	12×5ml			
NO.1	Adapter	12×1.5ml	20000r/min	28620xg	PP/PC tube
NO.2	Angle rotor	24x1.5/2.2ml			
	Adapter	24×0.5ml	16000r/min	24041xg	PP/PC tube
		24×0.2ml			
NO.3	Angle rotor	12×10ml			
	Adapter	12×5ml	15000r/min	21130xg	PP/PC tube
		12×1.5ml			
NO.4	Angle rotor	10×15ml			
	Adapter	10×5ml	15000r/min	20101	
		10×1.5ml	15000r/min	26161xg	PP/PC tube
NO.5	Angle rotor	6×50ml			
	Adapter	6×15ml		04055	
		6×10ml	14000r/min	21255xg	PP/PC tube
	Adapter	6×1.5ml			PP/PC tube



NO.6	Angle rotor	8×50ml			PP/PC tube
	Adapter	8×15ml		17226xg	
	Ŭ	8×10ml	12000r/m in		
	Adapter	8×1.5ml			
NO.7	Angle rotor	6×100ml			
	Adapter	6×50ml			
	0	6×15ml	13000r/m		
		6×10ml	in	20406xg	PP/PC tube
		6×5ml			
		6×1.5ml			
NO.8	Angle rotor	4×250ml			
	Adapter	4×100ml		14758xg	PP/PC tube
		4×50ml			
		4×5x15ml	10000r/min		
		4×5x10ml	_		
		4×10×1.5ml			
NO.9	Swingrotor	4×750ml			Round cup
	Adapter	4×26×5/2ml			
20		4×13×15/10ml			
		4×5×50ml	4000r/min	3443xg	
		4×3x100ml			PP/PC tube
		4×250ml			
		4×500ml			
NO.10	Microplate rotor	4×2×96 well	4000r/min	2978xg	4*2*96 deep well plate 4*4*96 shallow well plate
	Adapter	4×32×1.5ml			PP/PC tube



# Floor-Standing | High Speed |Refrigerated |Centrifuge

DSK-22R



#### • O Product Overview

High power AC frequency conversion motor winding indirect drive, small vibration, low noise, long service life.

Microcomputer control, colour screen display, programmable and storable, speed, centrifugal force, time can be displayed at the same time.

Six levels of damping damping, centrifugal effect to achieve the best, 10 kinds of lift speed curve, 30 kinds of free program can be programmed and stored, can meet different experimental needs.

Door cover, body configuration double silicone sealing ring, sealing performance is particularly good, long-term use does not aging, not deformation.

"Mute" patented technology, the maximum speed is less than 60dB.

Rotor automatic locking function, no need to tighten the rotor head, rotor automatic identification system, to prevent the wrong rotor running, effectively protect the safety of personnel and the stability of the centrifuge.

Multi-level protection functions such as over-speed, over-temperature, imbalance, electronic safety door lock, etc. are provided to ensure the safety of human and machine.

MODEL NO	DSK-22R		
Max. Speed	22000rpm		
Speed accuracy	±10rpm		
Max.Capacity	6x250ml		
Max. RCF	41495xg		
The refrigerant	R-22		
Temp.range(at RT 25°C)	-20°C~40°C		
Noise	< 60dB(A)		
Net weight	240kg		
Gross weight	280kg		
Motor	AC frequency conversion motor, direct drive		
Screen	Touch LCD color+digital screen		
Control	advanced CPU control system		
Timer range	1~99min59s		
Temp accuracy	±1°C		
Acceleration/DecelerationRate	10		
Refrigerant	R404A		
Dimension	690x590x820mm(L×W×H)		
Packing Size	920×790×1700mm(L×W×H)		



No.	Rotor	Capacity	Max.speed	Max. RCF	Note
NO.1	Fixed Angle Rotor	12×5ml	22000r/min	37877xg	PP/PCtube
NO.2	Fixed Angle Rotor	24x1.5ml	20000r/min	41495xg	PP/PCtube
NO.3	Fixed Angle Rotor	16x10ml	18000r/min	34835xg	PP/PCtube
NO.4	Fixed Angle Rotor	12x15ml	17000r/min	34835xg	PP/PCtube
NO.5	Fixed Angle Rotor	6×50ml	18000r/min	34777xg	PP/PCtube
NO.6	Fixed Angle Rotor	8x50ml	16000r/min	30395xg	PP/PCtube
NO.7	Fixed Angle Rotor	6×100ml	16000r/min	30395xg	PP/PCtube
NO.8	Fixed Angle Rotor	4x250ml	13000r/min	26039xg	PP/PCtube
NO.9	Fixed Angle Rotor	6×250ml	10000r/min	8721xg	PP/PCtube



## Floor-standing | Low SpeedCentrifuge DS-5M



This high-performance centrifuge boasts an impressive capacity, accommodating up to 4 x 1,000 ml in its swing-out rotor. It offers versatility with a wide range of buckets and adapters, accommodating tubes and flasks from 0.5 ml to 1,000 ml, along with micro plate rotor and deep-well plates. Users particularly value its flexibility, as it allows the use of a swing-out rotor either with or without a windshield.



#### • 0

0

- 1. Programmable and storable, allowing storage of up to 30 programs accessible with a single keystroke. Stored parameters remain even after the centrifugation is switched off.
- 2. Offers 10-speed acceleration and deceleration curves, effectively preventing secondary sedimentation and ensuring superior centrifugation performance.
- 3. Automatic lid-locking and holding during rotor operation, ensuring safety and ease of use.
- 4. Easily exchangeable rotors with a special rotor connector for convenient loading and unloading.
- 5. Incorporates a self-diagnostic system with high-strength chamber-coating and protective features.
- 6. "Mute" patented technology ensures quiet operation, with noise levels below 58 decibels even at maximum speed.
- 7. Automatic rotor identification system utilizes coded rotor identification to prevent overspeeding, enhancing safetv.
- 8. Design
- 9. Robust steel structure with an integrated blast-proof steel chamber; the 304# stainless steel chamber is autoclave-able and resistant to detergents and disinfection liquids.
- 10. Microprocessor control and flexible shaft drive system ensure smooth operation, minimal vibration, and low noise levels.
- 11. Utilizes frequency conversion motor drive, microcomputer control, and features a user-friendly 7-inch touch screen display for intuitive operation.
- 12. Observations window on the lid for speed calibration and noise measurement, enhancing user convenience.
- 13. Large-capacity rotor body with wind cover reduces rotor resistance, extending the motor's service life.
- 14. Equipped with double-layer silicone seal rings on the door cover and body for enhanced sealing.
- 15. Safety Standards and Certifications:
- 16. Complies with CE safety standards (EN61010-1 and EN 61010-2-020) and electromagnetic compatibility regulations (EN 61326-1).
- 17. Safety electrical lid interlock prevents the door from opening while the rotor is running and halts machine operation if the lid is open, displaying an error code for quick diagnosis.
- 18. Emergency lid-lock release engages in the event of a power failure, ensuring safe and timely access to the centrifuge.
- 19. Gas hinge on the lid provides drop protection and enhances user safety.
- 20. Multiple safety features are implemented to safeguard against overspeed, motor and chamber overheating, imbalance, etc., ensuring the safety of both users and the machine.



			1				
No.	Rotor	Capacity	Max.speed	Max. RCF	Note		
NO.1	Angle rotor Adaptor	12×5/10/15ml			PP/PCtube		
	l	12×2ml	6000r/min	4588xg	PP/PCtube		
NO.2	Swing rotor	steel frame rotor			PP/PCtube		
	Swing frame	4×100ml			PP/PCtube		
	Adaptor		-		PP/PCtube		
		4×10/15ml	5000r/min	4752xg	PP/PCtube		
	Swing frame			-,J2AY			
	1	4×50ml				PP/PC	PP/PCtube
	Adaptor		1				
	l	4×10/15ml					
NO.3	Swing rotor	steelrotor			PP/PCtube		
	Swing frame						
	Ħ	4×2×100ml			PP/PCtube PP/PCtube		
	Adapter						
00	Î	4×2×10/15ml			PP/PCtube		
	Swing frame		-				
	Ħ	4×2×50ml	4000r/min	3041xg	PP/PCtube		
	Adapter		-				
	Û	4×2×10/15ml					
	Swing frame	4×8×5/10/15ml			Vacuum blood collection tubes		
	Rack	4×12×2/5ml	]				



NO.4	Swing rotor				
		4x18×2/5ml	4000r/min	2773xg	Vacuum blood collection tubes
NO.5	Swing bucket	4×600ml			Square cup with wind cover
	Adapter	4×25×2/5ml			Vacuum blood collection tubes
*		4×12×10/15ml			
		4×5×50ml	4000r/min	3354xg	PP/PC tube
	_	4×4×100ml			
NO.6	Swing bucket	6×600ml			Square cup with wind cover
	Adapter	6×25×2/5ml			Vacuum blood collection tubes
		6×12×10/15ml	4000r/min	3400xg	PP/PC tube
		6×5×50ml			
		6×4×100ml			
NO.7	Swing bucket	4×500ml			Round cup with wind cover
	Adapter	4×17×2/5ml	4000r/min	3354xg	Vacuum blood collection tubes
		4×8×10/15ml			
		4×3×50ml			PP/PCtube
		4×100ml			
NO.8	Swingbucket	6×500ml			Round cup with wind cover
	Adapter	6×17×2/5ml			Vacuum blood collection tubes
		6×8×10/15ml	4000r/min	3400xg	PP/PCtube
		6×3×50ml			PP/PCtube
		6×100ml			
NO.9	Swing bucket	4×800ml			Square cup with wind cover
	Adapter	4×30×2/5ml		3443xg	Vacuum blood collection tubes
<b>8</b>		4×12×10/15ml	]		
		4×6×50ml	4000r/min		
	_	4×4×100ml			PP/PC tube



NO.10 Swing bucket Round cup with 4×750ml wind cover Adapter Vacuum blood collection tubes 4×26×2/5ml PP/PCtube PP/PCtube Adapter 4×13×10/15ml 4000r/min 3443xg Adapter 25 4×5×50ml PP/PCtube Adapter 00 4×3×100ml Swing bucket 4×1000ml Rhombus cup with NO.11 wind cover Adapter 4×42×2/5ml Vacuum blood collection tubes Adapter PP/PC tube 4×18×10/15ml PP/PC tube Adapter 4000r/min 3578xg 4×7×50ml PP/PC tube Adapter 4×4×100ml NO.12 Microplate rotor 4×2×96hole Square cup Adapter 4\*2\*96shallowwell 3284xg plate 4200r/min 4\*1\*96deep well 4×32×1.5ml plate PP/PCtube 3284xg



### Blood Tube Automatic Decapping Centrifuge Floor-standing Low SpeedCentrifuge

### **DS-600B**

• 0

**Product Overview** 

The floor standing refrigerated centrifuge FA6 offers exceptional performance, accommodating large capacity fixed rotors like 4\*1000ml and swing-out rotors. Widely utilized in blood stations, pharmaceutical factories, biochemistry, and biological product industries, it excels in tasks such as blood separation, protein precipitation, and cell collection. This model is CE security certified and adheres to ISO9001 and 13485 quality standards, ensuring top-notch quality and safety in its operations.



#### • 0

- 1. Programmable Storage: Stores up to 30 programs, allowing easy access with a single keystroke. Stored parameters remain even after centrifugation is switched off.
- 2. Acceleration & Braking Control: Offers 10 acceleration rates and 10 braking ramps, preventing secondary sedimentation and ensuring efficient centrifugation.
- 3. Lid-Locking System: Automatic lid-locking and holding during rotor operation enhances safety.
- 4. Rotor Exchange: Easily exchangeable rotors facilitated by a special rotor connector, simplifying loading and unloading.
- 5. Error Handling: Automatic troubleshooting includes on-screen error code indication and alarms for quick issue resolution.
- 6. Noise Control: Noise levels below 55 decibels at the highest rotational speed ensure a quiet working environment.
- 7. Rotor Safety: Automatic rotor identification system, utilizing coded rotor identification, prevents rotor overspeeding.
- 8. Design Features:
- 9. Durable Construction: Metal housing, metal lid, and stainless steel centrifuge chamber are autoclave-able and resistant to detergents and disinfection liquids.
- 10. Observations Window: Lid features a transparent window for speed calibration and noise measurement.
- 11. Advanced Control: Microprocessor control with frequency conversion A.C. motor drive ensures precise operations.
- 12. Intuitive Interface: TFT Touch Colour Screen displays Speed, Timer, RCF, Rotors, Program(Memory), Acceleration & Deceleration, and Error codes.
- 13. Sealing Efficiency: Double layers sealing ring for both lid and instrument ensures prolonged good sealing.
- 14. Safety Measures:
- 15. Certifications: Holds CE certification and adheres to safety standards EN61010-1 and EN 61010-2-020, and Electromagnetic Compatibility standard EN 61326-1.
- 16. Electrical Interlock: Safety electrical lid interlock prevents the door from opening while the rotor is running. The machine won't operate if the lid is open, displaying an error code.
- 17. Emergency Release: Emergency lid-lock release engages in case of a power failure, ensuring safety during unexpected power interruptions.
- 18. Gas Hinge: Gas hinge prevents lid drops, enhancing overall safety.
- 19. Comprehensive Protections: Safeguards against overspeed, overheating (motor and chamber), imbalance, etc., ensuring both user and machine safety.



MODEL NO	DS-600B		
Max. RPM / Fixed angle	6000rpm/4588xg		
Max Capacity(ml)	4*1000ml		
Safety lid lock	Yes		
Max. acceleration time [s]	15 seconds		
Display	LCD		
Automaticrotoridentification	Yes		
Motorized lid open & close	Yes		
Parameters on display window	RPM (RCF), Time, ACC, DEC		
Time control	1s-99minutes adjustable		
Dimension(mm)	750x620x890mm(LxWxH)		
Speed accuracy	±10r/min		
Noise(dBA)	≦55dB(A)		
ACC/DEC	10/10 steps		
Max. braking time [s]	15 seconds		
Program memory	10		
Lid drop protection	Yes		
Imbalance cut-off	Yes		
Power requirement	1200W		
Power supply	AC220V,50HZ,10A		
Weight without rotor (kg)	176KGS		

No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12x5/10/15ml			PP/PC tube
	Adapter	12x2ml	6000r/min	4588xg	PP/PC tube
NO.2	Swing bucket	4x600ml			Square cup with wind
	Adapter		1		cover
-		4x25x2/5ml			Vacuum blood collection tubes
	Adapter	4x12x10/15ml	4000r/min	3354xg	PP/PC tube
	Adapter	4x5x50ml			PP/PC tube
	Adapter	4x4x100ml			PP/PC tube



No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
N0.3	Swing bucket	4×800ml			Square cup with wind cover
	Adapter	4×30×2/5ml			wind cover
		4×12×10/15ml			Vacuum blood collection tubes
		4×6×50ml	4000r/min	3443xg	
		4×4×100ml			PP/PC tube
NO.4	Swing bucket	6×600ml			Square cup with
	Adapter	6×25×2/5ml	-		wind cover Vacuum blood
			-		collection tubes
		6×12×10/15ml	-		
		6×5×50ml			
	=	6×4×100ml	4000r/min	3400xg	PP/PC tube
NO.5	Swing bucket	4×1000ml	4000r/min	3578xg	Rhombus cup with wind cover
	Adapter	4×42×2/5ml			Vacuum blood collection tubes
		4×18×10/15ml			
		4×7×50ml			PP/PC tube
		4×4×100ml			



# Floor-Standing|Low Speed |Refrigerated |Centrifuge DSR-80B

#### • 0

#### **Product Overview**

The DSR-80B is a refrigerated floor-standing centrifuge tailored for blood banks and transfusion centers. It efficiently handles large specimen volumes, accommodating up to twelve 500 ml blood pouches per run. Its smooth operation ensures consistent and reliable sedimentation results.

This high-performance blood bank centrifuge features precise temperature control, ranging from -20°C to +40°C. Its Rapid Temp quick cooling function is especially useful for pre-chilled blood pouches, allowing the chamber and accessories to be pre-cooled to a specific temperature, ensuring optimal processing conditions.



#### • 0

- 1. Robust Construction: The rotor body is made of national aviation standard aluminum 7075-T6, which is processed and molded after forging treatment and Class A deep flaw detection treatment, and passes the static balance test and dynamic balance test to ensure the safety and reliability of the rotor body.
- 2. Precision Rotor Design: Rotor body made of national aviation standard aluminum LC4, processed and shaped after forging treatment, and subjected to A-level depth flaw detection treatment, static balance test, and dynamic balance test for optimal performance.
- 3. User-Friendly Features: Equipped with an observations window for speed calibration and noise measurement. Microprocessor control with carbon brushless large torque frequency conversion motor ensures maintenance-free operation and no dust pollution. LCD display shows Speed, Timer, RCF, Rotors, Program(Memory), Acceleration & Deceleration information, and Error codes.
- 4. Efficient Capacity: can process up to 12 bags of 500 ml whole blood or 6\*2400 ml for a total of 14,400 ml specimens at a time.
- 5. Temperature Control: CFC-free refrigeration system with double-cycle refrigeration and precise temperature control ranging up to -20°C. Pre-cooling feature ensures optimal temperature conditions.
- 6. Programmable Operation: Allows programming and storage of up to 30 programs. Offers 10 acceleration rates and 10 braking ramps to avoid secondary sedimentation for enhanced centrifugation efficiency.
- 7. Convenient Operation: Features automatic lid-locking and holding during rotor run. Easily exchangeable rotors and a special rotor connector facilitate effortless loading and unloading.
- 8. Wind cover shield prevents air currents from affecting processed specimens.
- 9. Safety Measures: Produced according to international safety regulations (e.g., IEC 61010). Safety Electrical lid interlock ensures the door cannot open when the rotor is running. The machine won't operate if the lid is open, and error codes are displayed. Emergency lid-lock release is available in case of power failure. Gas hinge provides lid drop protection. Multiple safety features protect against over speed, over heating (motor, chamber), imbalance, ensuring user and machine safety.



MODEL NO	DSR-80B		
Speed range(rpm)	0-8000rpm adjustable		
Max Capacity(ml)	6*2400ml/12pcs500ml blood bags		
RCF range (xg)	0-14900xg adjustable		
Time range	0-99nin59s adjustable		
Noise(dBA)	≦65dB(A)		
Refrigerant	R404A		
Display	LCD		
Power supply	AC220V,50HZ,15A,7KW		
Control&drive microprocessor	Adopt frequency conversion motor flexible shaft drive system to directly drive the rotary head, smooth operation,microprocessorcontrol		
Speed accuracy	±20r/min		
Temperature range(°C)	-20°C~+40°C adjustable		
Temperature accuracy	±1°C		
Acceleration/Deceleration rates	1 10		
Daily-use program	30		
Net weight(without rotor)	600KGSs		
Dimension(L×W×H)	1000×850×1180mm		

No.	Rotor	Capacity	Speed	RCF	Note
NO.1	Angle Rotor	6×1000ml	8000r/min	14900xg	
NO.2	Swing Rotor	6×2400ml	4000r/min	5330xg	12 pcs of 500ml blood bags
NO.3	Swing Rotor	6×2×1000ml	4000r/min	5800xg	



# Floor-Standing | Low Speed | Refrigerated | Centrifuge

# DS-5M

#### • 0

#### **Product Overview**

The high-performance centrifuge DS-5M boasts an impressive capacity of up to 4 x 1,000 ml in its swing-out rotor design. Its versatility shines through with a wide array of buckets and adapters, accommodating tubes and flasks ranging from 0.5 ml to 1,000 ml, including microtiter plates and deep-well plates. Users particularly appreciate the option to utilize a swing-out rotor with or without a windshield, enhancing its adaptability for various applications. Additionally, the DS-5M is equipped with a rapid and precisely adjustable refrigeration system, offering a temperature range spanning from -20°C to +40°C. Notably, its Rapid Temp quick cooling function stands out, enabling the centrifuge chamber and accessories to be efficiently pre-cooled to a specific temperature, ensuring optimal performance and reliability.



#### • 0

- 1. The centrifuge is built with a robust high-quality steel structure and features a blast-proof steel chamber and autoclave-able 304# stainless steel components, making it resistant to detergents and disinfection liquids. Its smooth operation is ensured by a flexible shaft drive system, driven by a frequency conversion motor controlled by a microprocessor. The centrifuge's performance is displayed and controlled via a user-friendly 7-inch touch screen, offering detailed information on speed, timer, RCF, rotors, program settings, acceleration, deceleration, and error codes.
- 2. The large capacity rotor body, equipped with a windshield, reduces rotor resistance and extends the motor's service life. Double-layer silicone seal rings on the door cover and body maintain a tight seal.
- 3. In terms of functionality, this floor standing low speed refrigerated centrifuge features a CFC-free compressor with a pre-cooling function and double-cycle refrigeration, ensuring precise temperature control within a range of -20°C to 40°C. It allows for the storage of up to 30 programs, enabling easy access with one-touch saving. Ten-speed acceleration and deceleration curves are available to prevent secondary sedimentation, optimizing the centrifugation process.
- 4. Safety is paramount, and the centrifuge complies with international safety regulations It incorporates an electrical lid interlock, preventing the door from opening while the rotor is running and ensuring the machine won't operate if the lid is open or if errors occur. In the event of a power failure, an emergency lid-lock release mechanism is in place. A gas hinge protects against lid drops, and various safety features are integrated to prevent over-speed, over-heating, imbalance, and other issues, guaranteeing the safety of both the operator and the machine.

MODEL NO	DS-5M		
Max.speed	6000rpm		
Max.capacity	4×1000ml		
Motor	Frequency Converter motor		
Temp.range	-20°C~40°C		
Display	LCD		
Refrigerant	R404A		
Dimension	810×670×890mm(L×W×H)		
Max.rcf	4752×g		
Speed accuracy	±10rpm / ±10xg		
Timerrange	1s~99min		
Temp. accuracy	±1°C		
Noise	<58dB(A)		
Acceleration/Decelerationrates/Deceleration rates/Deceleration rates	1 10		
Weight	200kg		



No.	Rotor	Capacity	Max.spe ed	Max. RCF	Note
NO.1	Angle rotor	12×15ml/10/5ml	Cu		PP/PCtube
	Adapter	12×2ml	6000r/mi n	4588xg	PP/PCtube
NO.2	Swing rotor	steel frame rotor			PP/PCtube
	Swing frame				
A894	Ť	4×100ml			PP/PCtube
Topy	Adapter	4×15/10ml	5000r/mi	4752xg	PP/PCtube
	Swing frame	4×50ml			PP/PCtube
	Adapter	4×15/10ml			PP/PCtube
NO.3	Swing rotor	steelrotor			PP/PCtube
	Swing frame	4×2×100ml			PP/PCtube
	Adapter	4×2x15/10ml			PP/PCtube
	Swing frame	4×2×50ml	4000r/mi		PP/PCtube
	Adapter	4×2x15/10ml	n 400017111	504180	PP/PCtube
	Swing frame	4×8×15/10/5ml			PP/PCtube
	Rack	4×12×5/2ml			Vacuum blood collection tubes
NO.4	Swing rotor	4X18×5/2ml	4000r/ min	2773xg	Vacuum blood collection tubes

NO.5	Swingbucket	4×600ml			Square cup with wind cover	
8	Adapter	4×25×5/2ml	-		Vacuum blood collection tubes	
		4×12×15/10ml	4000r/mi	3354xg	vacuum blood collection tubes	
		4×5×50ml	-  n	y	PP/PC tubo	
	_	4×4×100ml			PP/PC tube	
NO.6	Swing bucket	t 6×600ml			Square cup with wind cover	
	Adapter	6×25×5/2ml	4000 */***		Vacuum blood collection tube	
		6×12×15/10ml	4000r/mi n	3400xg		
		6×5×50ml			PP/PC tube	
	_	6×4×100ml				
NO.7	Swing bucket	4×500ml			Round cup with wind cover	
	Adapter	4×17×5/2ml	4000r/mi		Vacuum blood collection tube	
284	38	4×8×15/10ml	n	3354xg		
		4×3×50ml			PP/PCtube	
		4×100ml				
NO.8	Swing bucket	6×500ml			Round cup with wind cover	
	Adapter	6×17×5/2ml			Vacuum blood collection tube	
	18	6×8×15/10ml	4500r/min	4324xg		
		6×3×50ml			PP/PCtube	
		6×100ml				
NO.9	Swing bucket	4×800ml		3443xg	Square cup with wind cover	
	Adapter	4×30×5/2ml			Vacuum blood collection tube	
*		4×12×15/10ml	4000r/min			
		4×6×50ml	_		PP/PC tube	
		4×4×100ml				
NO.10	Swing bucket	4×750ml	_	3443xg	Round cup	
	Adapter	4×26×5/2ml			Vacuum blood collection tube	
88 ·	-	4×13×15/10ml	4000r/min		PP/PCtube	
		4×5×50ml				
		4×3×100ml				
NO.11	Swing bucket	4×1000ml			Rhombus cup with wind cover	
	Adapter	4×42×5/2ml		3578x g	Vacuum blood collection tubes	
		4×18×15/10ml	4000r/m			
<b>1</b> 83		4×7×50ml			PP/PC tube	
		4×4×100ml				
NO.12	Microplate rotor	4×2×96hole			Square cup 4*2*96 deep wo plate	
	Adapter	ter		3284x	4*4*96shallow well plate	
		4×32×1.5ml	in	g	PP/PCtube	



## Floor-Standing | Low Speed |Refrigerated |Centrifuge DS-6MB

#### • 0

Product Overview

The floor-standing refrigerated centrifuge DS-6MB is meticulously engineered to cater to the diverse needs of blood banks, clinical laboratories, serology investigations, molecular biology, serum separation, and pharmaceutical applications. Its exceptional performance lies in its ability to ensure precise and repeatable parameters, including speed, time, temperature, acceleration, and deceleration, enabling flawless separations of different blood fractions.

#### • 0

- 1. AC variable frequency motor drive
- 2. Touch LCD screen for easy configuration control, displaying speed, timer, RCF, temperature, rotors, program settings, acceleration & deceleration, and error codes.
- 3. Efficient and eco-friendly refrigeration system with precise temperature control.
- 4. Sturdy steel structure, autoclave-able 304# stainless steel chamber, resistant to detergents and disinfectants.
- 5. High-efficiency compressor with dual circuits for rapid temperature changes, suitable for platelet separation.
- 6. Swing-out rotor head made of high-density material, accommodating 6x450ml triple or quadruple blood bags simultaneously.
- 7. Double-layer silicone seals on the door cover and body for secure sealing.
- 8. Pre-cooling function, double-cycle refrigeration, and  $\pm 1^{\circ}$ C high-temperature accuracy with temperature range from -20°C to 40°C.
- 9. Programmable and storable, with capacity for 30 programs, accessible with one keystroke even after shutdown.
- 10. 10 acceleration rates and 10 braking ramps to prevent secondary sedimentation for better centrifugation results.
- 11. Automatic lid-locking during operation.
- 12. Easily interchangeable rotors with a special connector for effortless loading and unloading.
- 13. Automatic troubleshooting with error code display and alarms on the screen.
- 14. "Mute" patented technology for noise levels below 58 decibels at maximum speed.
- 15. Automatic rpm/rcf conversion and rotor identification system to prevent overspeeding.

MODELNO	DS-6MB		
Max. speed	6000rpmadjustable		
Speed accuracy	$\pm$ 20r/min		
Timer range	1s~99minadjustable		
Display	LED		
Temp.range	-20°C~+40°Cadjustable		
Refrigerant	R404A		
Power supply	AC220V, 50Hz, 30A, 3kw		
Drive System	AC variable frequency motor drive		
Dimension	840×730×1220mm(L×W×H)		
Max.RCF	6880×g		
Max. capacity	6x1200ml		
Daily-use program	30		
Acceleration/ Deceleration rates	12/12		
Temp accuracy	±1°C		
Noise	<58db		
Net Weight	260kg		





No.	Rotor	Capacity	Max.speed	Max. RCF	Note
NO.1	Fixed Angle Rotor	6×500ml	6000r/min	6880xg	PP/PCtube
NO.2					
	Swing Rotor	6×1200ml	4200r/min	5600xg	Oval cup
NO.3					
	Swing Rotor	6×1000ml	4200r/min	5600×g	Round cup



# Floor-Standing | Low Speed | Refrigerated | Centrifuge

#### • 0

#### **Product Overview**

The Floor Standing Refrigerated Centrifuge DS-800C can handle volumes of up to 4 liters, featuring a swing bucket for 4x1200ml and a fixed-angle rotor for 4x500ml. This centrifuge provides a comprehensive solution for sample separation needs in blood banks, research labs, clinics, biotechnology, industry, and hospitals



#### • 0

- 1. High-power AC variable frequency motor direct drive, high precision, low noise, long lifespan.
- 2. Utilizes efficient and eco-friendly refrigeration system, precise temperature control, no environmental pollution.
- 3. Microcomputer control, large color screen display, programmable and storable, simultaneous display of speed, centrifugal force, and time.
- 4. 10 lifting speed curves, 30 customizable and storable programs, adaptable for different experimental needs.
- 5. Three-level damping system for optimal centrifugation, equipped with electronic door lock, automatic diagnosis for overspeed, over-temperature, and faults, multiple protections ensuring user safety.
- 6. Adapters customized for experiments from 0.5 to 500ml can be provided.
- 7. CFC-free cooling system with high efficiency environmental protection refrigeration system and dual circuit control for precise temperature control
- 8. Self-diagnostic system with high-strength chamber-coating and protective
- 9. "Mute" patented technology, the highest speed operation is less than 58 decibels.
- 10. Automatic rpm/rcf conversion
- 11. Automatic rotor identification system, coded rotor identification prevents the rotor from over speeding.

MODEL NO	DS-800C
Speed range(rpm)	0-7000rpm adjustable
Max Capacity(ml)	4x1200ml
RCF range (xg)	0-8897xg adjustable
Time range	1s-99min adjustable
Noise(dBA)	≦60dB(A)
Refrigerant	R404A
Display	Touch LCD screen
Power supply	AC220V,50HZ,16A,2200W
Control&drive microprocessor	High precision and low noise AC frequency conversion motor direct drive Microprocessor control
Speed accuracy	±20r/min
Temperature range(°C)	-20°C~+40°C adjustable
Temperature accuracy	±1°C
Acceleration/Deceleration rates	1 10
Daily-use program	30
Net weight(without rotor)	190KGS
Dimension	810×670×890(L×W×H)



No. Rotor Capacity Max.speed Max.RCF Note NO.1 Angle rotor  $4 \times 500 ml$ Adapter 4 imes 100ml  $4 \times 3 \times 50 ml$ PP/PC tube 7000r/min 8897xg  $4 \times 8 \times 15 ml$  $4 \times 8 \times 10$ ml NO.2 Angle rotor  $18 \times 50$ ml Adapter  $18 \times 15$ ml  $18 \times 10$ ml 7000r/min 7121xg PP/PC tube Adapter  $18 \times 1.5$ ml NO.3 Swing bucket  $4 \times 1000 ml$ Adapter  $4 \times 26 \times 5/2$ ml 4\*15\*10/15ml PP/PC tube 4500r/min 5025xg  $4 \times 5 \times 50 ml$  $4 \times 3 \times 100$ ml NO.4 PP/PC tube Swing bucket 4500r/min 5127xg 4x1200ml



## Micro | High Speed |Ventilated |Centrifuge DS-165

#### • 0

#### **Product Overview**

Mini centrifuge DS-165 is designed to be compact, portable, and easy to use, making them ideal for small labs or field work. It is an essential tool for many biological and chemical research applications, which is commonly used for DNA extraction, protein purification, and other molecular biology applications.



#### • 0

- 1. Super silent: using special motor, strong power, super silent, stable operation, noise is generally less than 47db, the highest does not exceed 49db.
- 2. Small vibration: well-designed vibration damping device, the movement amplitude is extremely small.
- 3. Easy to replace the rotor: clever design, without any tools and can replace the rotor;
- 4. High centrifugal force: relative centrifugal force up to 9660xg.
- 5. Fast stopping: the fastest stopping time does not exceed 20 seconds, the fastest acceleration does not exceed 13 seconds.

MODEL NO	DS-165		
Speed range(rpm)	500-12000rpm adjustable		
Max Capacity(ml)	12*1.5-2.2ml+8*4rows*0.2ml		
Noise(dBA)	≦49dB(A)		
Dimension(mm)	250 $ imes$ 180 $ imes$ 120mm(L $ imes$ W $ imes$ H)		
Power supply	AC100-250V 50/60Hz, 45W		
Speed accuracy	±20rpm		
RCF range (xg)	0-9660xg adjustable		
Time range	1-99min./1-59sec.		
Net weight(without rotor)	2KGS		



No.	Rotor	Max.Capacity	Max. speed	Max. RCF	Note
	Composite rotor	12x1.5-2.2ml+ 8x4rowsx0.2ml			
NO.1	Adapter	12x0.5ml	12000r/mi	9500xg	Standard
	Adapter				
NO.2	12Combined rotor	12 x 4rows x 0.2ml	12000r/mi n	5960xg	Standard
NO.3	Angle rotor	4x5ml	12000r/mi n	9660xg	
NO.4	Angle rotor	12pcs capillary tubes	12000r/mi n	8371xg	
	Angle rotor	4x4ml	7000r/min	3180xg	
NO.5	Adapter	4x1.1-1.8ml	7000r/min	3180xg	





# Micro|Low Speed |Ventilated |Centrifuge

# DS-I4 / DS-I7

### • 0

### **Product Overview**

1.Ultra-quiet: the use of special motors, strong power, ultra-quiet, stable operation, the noise is generally less than 45db, the highest does not exceed 49db.

2. Fast instant acceleration: 90% of the maximum speed is reached within 5 seconds.

3. Small vibration: well-designed shock absorbing device, the movement amplitude is extremely small.

4. Easy to replace the rotor: clever design, without any tools that can replace the rotor.

5. High centrifugal force: relative centrifugal force up to 810xg/3260xg.6. Fast shutdown: designed with two shutdown modes, the free shutdown does not exceed 15 seconds.

7. High safety factor: there are three touch switches inside, and it takes three switches to close at the same time to run, avoiding irregular operation affecting safety.



MODEL NO	DS-I4	DS-I7	
Maximum speed	4000 rpm	7000 rpm	
Maximum RCF	810 xg	3260 xg	
Maximum capacity	Angle rotor 8x2 ml		
Noise level	49dB(A)		
Speed range(rpm)	0-4000rpm/7000rpm	adjustable	
Max Capacity(ml)	8*2ml		
Noise(dBA)	≦49dB(A)		
Dimension(mm)	180×155×120mm(L×W×H)		
Power supply	AC85-265V 50/60Hz, 30W		
Speed accuracy	±10rpm		
RCF range (xg)	0-810xg/3260xg adjustable		
Time range	1-99minutes adjustable		
Net weight(without rotor)	1.5KGS		



# **DS-I4 Rotor**

No.	Rotor	Capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	8×0.z`2-0.5- 1.5-2ml	4000r/min	810xg	PP/PC tube / Vacuum blood collection tubes
NO.2	PCR tube rotor	2×8×0.2ml	4000r/min	810xg	PCR 8 strip tubes

# **DS-I7 Rotor**

No.	Rotor	Capacity	Capacity	Max.RCF	Note
NO.1	Angle rotor	8×0.2-0.5- 1.5-2ml	7000/min	7000/min	PP/PC tube / Vacuum blood collection tubes
NO.2	PCR tube rotor	2×8×0.2ml	7000/min	3260xg	PCR 8 strip tubes



# (vertical) crude oil water content tester parameter table

# DS-YY-40FL

### • 0

### **Product Overview**

The DS- YY-40 FL crude oil water content tester is designed and produced by our company in accordance with the GB/T6533-86 analysis standard. It is designed to address the shortcomings of the gravimetric method, which takes a long time to measure sand content, the operation is complicated, and the measurement is inaccurate. Users Just put the sample into the instrument, and the reading can be taken in 5-10 minutes, eliminating the cumbersome operation of the gravimetric method, and is suitable for the detection of various crude oils. It is one of the main tools for determining the water content of crude oil in oil fields.



### • 0

- 1. Microcomputer control, color screen display, variable frequency motor drive, electronic door lock.
- 2. The analysis time is <15 minutes, the analysis time is short and the analysis efficiency is high.
- 3. Instrument parameters : The memory and display of analysis temperature, analysis time, rotation speed, and accumulated working time are all displayed by CPU liquid crystal.
- 4. This instrument is also particularly suitable for on-site rapid determination of crude oil sand content.
- 5. The instrument also has the characteristics of low energy consumption, low noise, stable performance, easy maintenance, and long service life, which are currently unmatched by similar products.
- 6. Multiple protections are safe and reliable: It is equipped with multiple protections such as overspeed, overtemperature imbalance, etc., and has a self-diagnosis protection function to ensure the safety of people and instruments.

MODEL NO	DS-YY-40FL
maximum speed	4 000r/min
Maximum capacity	4x100ml
Speed accuracy	± 10r /min
Temperature range	room temperature +10 $^{\circ}\mathrm{C}$ $\sim$ 70 $^{\circ}\mathrm{C}$
Timing range	:0 $\sim$ 99min 5 9 s
Overall machine noise	:<65dB
Power supply voltage	220V±10% 50Hz
Machine power	1.5KW
HeavyQuantity	excluding rotor) 140 kg
Overall dimensions	750 × 620 × 900 mm (L×W×H)



serial number	name	capacity	Rotating speed	centrifugal force	Remark
	Horizontal hanging basket	4*100ml	3000r/min	2102xg	Fat crude oil centrifuge tube with pointed bottom, length 162mm, outer diameter 44.4mm
NO.1	adapter	4*100ml	3000r/min	2102xg	Pointed bottom thin crude oil centrifuge tube, length 199mm, outer diameter 37.2mm
	adapter	4*50ml	3000r/min	2102xg	Pointed bottom crude oil centrifuge tube, length 148.5mm, outer diameter 41.8mm
	horizontal rotor	36*10ml	4000r/min	3150xg	Special round basket with customised adapters for centrifuge tubes
NO.2	Adapter	36*10ml	4000r/min	3150xg	Sharp-bottomed, thick crude oil centrifuge tube, length 112mm, outer diameter 17.1mm



### Benchtop oil water content tester

# DS-YY-40TM

### • 0

### **Product Overview**

DS-YY-40TM crude oil water content tester is designed and produced by our company according to GB/T6533-86 analysis standard. It is designed for the shortcomings of weight method to measure sand content for a long time, complicated operation and inaccurate measurement. The user only needs to put the sample into the instrument, and it can be read after 5-10 minutes, saving the tedious operation of weight method. Suitable for all kinds of crude oil detection. It is one of the main tools for the determination of water content in oil field.



### • 0

#### **Product Features**

Microcomputer control, color screen display, variable frequency motor drive, electronic door lock.

Analysis time <15 minutes, analysis time is short, analysis efficiency is high.

Instrument parameters: the memory and display of analysis temperature, analysis time, revolution and accumulated working time are all controlled by CPU digital display.

The instrument is also especially suitable for the field rapid determination of crude oil sand.

The instrument also has the characteristics of low energy consumption, low noise, stable performance, easy maintenance and long service life, which is incomparable to similar products at present.

All kinds of protection safe and reliable: with speeding, overtemperature, imbalance and other protection, and has a self-diagnosis protection function to ensure personal and instrument safety.

MODEL NO	DS-YY-40TM		
maximum speed	4000r/min		
Maximum capacity	36X10ml		
Rotational speed accuracy:	±10r/min		
Temperature range	+10°C~70°Ceff		
Timing range	0 to 99 minutes59s		
Machine noise	1. <65dB		
Power supply voltage	220V±10% 50Hz		
Power	1.3KW		
Overall dimensions	580×440×360mm(L×WxH)		
Weight:	(without rotor) 45kg		

number	Name	Capacity	RPM	Centrifugal force	Remarks
NO.1	Horizontal rotor	36x10ml	4000 r/min	3150xg	Pointed bottom fat crude oil centrifuge tube, length 112mm, outer diameter 17.1mm



### PRP/CGF/A-PRF/I-PRF Multi-purpose Centrifuge DS-L-5R

### • 0

### **Product Overview**

The DS-L-5R low-speed refrigerated centrifuge is pivotal in scientific and medical research, enabling the separation and purification of materials based on their density and size. Widely utilized in orthopedics, pain management, surgery, and medical cosmetology, it plays a crucial role in various fields. PRP/ACT, rich in growth factors, accelerates soft tissue and bone tissue recovery, minimizes postoperative reactions and infections, and promotes skin rejuvenation.



### • 0

- 1. The Low-Speed PRP Centrifuge Machine BYL-5R is extensively used in orthopedics, pain medicine, surgery, and medical aesthetics. PRP/ACT, rich in various growth factors, accelerates the healing of soft and bone tissues, reduces post-operative reactions, fights infections, and stimulates skin cell regeneration for anti-aging and rejuvenation effects.
- 2. This machine can store over 25 centrifugal programs, accommodating the separation of adipose stem cells, PRP, CGF, APRF, IPRF, and more. It features a built-in special variable speed program, suitable for 60ml/20ml/10ml/8ml syringes or PRP tubes. The rotor parts, including cups and adapters, are autoclavable for sterilization.
- 3. Operating in a low-temperature centrifugation environment significantly enhances the concentration/activity of PRP/ACT growth factors and improves fat survival rates. The BYL-5R allows real-time modification of running status, error codes, and parameters without the need to stop the operation.
- 4. Controlled via a large LCD color screen, it offers 10 speed curve options to meet diverse experimental requirements. RPM, centrifugal force, time, and other parameters are displayed clearly. Featuring patented low-noise technology, this centrifuge operates at a maximum rotational noise level of only 58 decibels.
- 5. Equipped with electronic door lock, over-speed protection, unbalance protection, and fault code display, it ensures a secure and efficient centrifugation process

MODEL NO	DS-L-5R
MAXIMUM SPEED	6000 rpm
Maximum RCF	4588 xg
Noise level (dBA)	58dB(A)
Temperature	-20°C~40°C
Accuracy	±1°C
Speed range(rpm)	0-6000rpm adjustable
Max Capacity(ml)	4*500ml
RCF range (xg)	0-4588xg adjustable
Temperature control range	-20°C~+40°C
Noise(dBA)	≦58dB(A)
Power supply	AC220V,50HZ,10A, 1050W
Time range	1-99minutes 59s adjustable
Speed accuracy	±10r/min
ACC/DEC	1-10 rates
Temperature control accuracy	±1°C
Dimension(mm)	670x740x370mm(LxWxH)
Net weight(without rotor)	90KGS

No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12x15/10/5ml	6000r/min	4588xg	PP/PC tube
NO.2	Swing bucket	4x250ml			Round cup
	Adapter	4x50ml			
		4x30ml	4000r/min	3043xg	
	Ŭ	4x20ml			PP/PC tube
		16x8/10ml			

NO.3	Swing rotor	steel frame rotor 4X2X100ml			Injection syringe
	Swing frame	4727100111			or PRP tube
	Ħ	4x2x100ml	4000r/min	3041xg	
	Adapter	4x2x50ml			PP/PC tube
		4x2x30ml			FFFC tube
		4x2x20ml			
		4x2x8/10ml			
NO.4	Swing rotor	steel frame rotor 4x100ml			Injection syringe
	Swing frame				or PRP tube
	Ŷ	4x100ml	4000r/min	3041xg	
0.0	Adapter	4x50ml			PP/PC tube
		4x30ml			TIT C LUDC
	$\sim$	4x20ml			
		4x8/10ml			
No.5					
	Angle Rotor	8x8/10ml	2400r/min 547xg 4min rotor		CGF special rotor and program



### PRP/CGF/A-PRF/I-PRF Multi-purpose Centrifuge

# DSL-6R

### • 0

### **Product Overview**

Low-speed refrigerated centrifuge DSL-6R separates materials based on density and size, crucial in scientific and medical research. Common in orthopedics, pain, surgery, and medical cosmetology, it aids tissue recovery, red Auces postoperative reactions, fights infection, and rejuvenates skin, thanks to PRP/ACT's rich growth factors.



### • 0

- 1. Widely used in orthopedics, pain medicine, surgery, and medical aesthetics, utilizing PRP/ACT for tissue healing and anti-aging effects.
- 2. Powered by an AC variable frequency motor drive with "Mute" patent technology, ensuring quiet operation below 58 decibels.
- 3. Offers automatic rpm/rcf conversion and LCD display for easy parameter setup.
- 4. Features a high-efficiency, eco-friendly refrigeration system with precise temperature control.
- 5. Supports 25 stored programs, enabling seamless transitions between RPR, CGF, APRF, IPRF.
- 6. Built-in variable speed program suitable for various injection syringes or PRP separation tubes.
- 7. Allows sterilization of swing buckets, adapters, or rotors through high-temperature methods.
- 8. Provides 10 acceleration rates and 10 braking ramp settings, preventing secondary sedimentation for effective centrifugation.
- 9. Ensures safety with automatic lid-locking during rotor operation and facilitates easy rotor exchange.
- 10. Automatically identifies rotors, preventing overspeeding, and displays error codes and alarms for troubleshooting.
- 11. Equipped with a CFC-free refrigeration system, pre-cooling function, and precise temperature control down to -20°C.

MODEL NO	DSL-6R
Speed range(rpm)	0-6000rpm adjustable
Max Capacity(ml)	4*750ml
RCF range (xg)	0-4588xg adjustable
Temperature control range	-20°C~+40°C
Noise(dBA)	≦58dB(A)
Power supply	AC220V,50HZ,10A,1800W
Time range	1-99minutes 59s adjustable
Speed accuracy	±10r/min
ACC/DEC	1-10 rates
Temperature control accuracy	±1°C
Dimension(mm)	750x620x900mm(LxWxH)
Net weight(without rotor)	200KGS



No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12x15/10/5ml	6000r/min	6080xg	PP/PC tube
NO.2	Swing bucket	4x750ml	4000r/min	3443xg	Round cup
NO.3	Swing rotor	steel frame rotor 4x2x100ml			Injection
	Swing frame	4x2x100ml			syringe or PRP tube
	Adapter	4x2x50ml	4000r/min	3041xg	
	-	4x2x30ml			PP/PC
	$\circ$	4x2x20ml			tube
		4x2x8/10ml			
NO.4	Swing rotor	steel frame rotor 4x100ml			Injection
	Swing frame	4x100ml			syringe or PRP tube
	Adapter	4x50ml			
	0	4x20/30ml	4000r/min	3041xg	PP/PC tube
		4x8/10ml			
No.5	Angle Rotor	8x8/10ml	2700r/min 693xg 2min 2400r/min 547xg 4min 2700r/min 693xg 4min 3000r/min 856xg 3min	CGF special rotor and progra m	



### PRP/CGF/A-PRF/I-PRF Multi-purpose Centrifuge

# DS-42F

### • 0

### **Product Overview**

The DS-42F low-speed centrifuge is crucial for separating and purifying materials based on their density and size. Widely employed in scientific and medical fields, it enables researchers and scientists to delve into diverse biological and chemical processes. Mainly utilized in orthopedics, pain medicine, surgery, and medical cosmetology, it plays a vital role. PRP/ACT, rich in growth factors, accelerates soft tissue and bone tissue recovery, reduces postoperative reactions, fights infections, and rejuvenates the skin.



### • 0

- 1. Microprocessor Control: Equipped with a frequency conversion A.C. motor drive.
- 2. LED Display: Displays Speed, Timer, RCF, Rotors, Program (Memory), Acceleration & Deceleration, and Error Code information.
- 3. Double Layers Sealing: Centrifuge lid and instrument feature double layers sealing rings for prolonged effective sealing.
- 4. Program Storage: Stores 25 programs, transferable among RPR, CGF, APRF, IPRF procedures.
- 5. Variable Speed Program: Built-in variable speed program, suitable for various injection syringe sizes (60ml/20ml/10ml/8ml) or PRP separation.
- 6. Sterilization Capability: Swing buckets, adapters, or rotors can be sterilized at high temperatures for safety and hygiene.
- 7. Compliance: Produced according to international safety regulations like IEC 61010.
- 8. Electrical Lid Interlock: The door cannot be opened when the rotor is running, and the machine won't operate if the lid is open, displaying an error code.
- 9. Emergency Lid-Lock Release: Automatically releases the lid lock in case of power failure, ensuring user safety during unexpected power interruptions.
- 10. Gas Hinge: Equipped with a gas hinge for lid drop protection, preventing sudden lid closures.
- 11. Multiple Protections: Safety mechanisms are in place for overspeed, overheating (motor and chamber), imbalance, etc., guaranteeing user-machine safety.

MODEL NO	DS-42F		
Speed range(rpm)	0-6000rpm adjustable		
Max Capacity(ml)	6x50ml		
RCF range (xg)	0-4588xg adjustable		
Noise(dBA)	≦50dB(A)		
Power supply	AC110-220V,50-60HZ,5A, 150W		
Time range	1-99minutes 59s adjustable		
Speed accuracy	±10r/min		
ACC/DEC	1-10 rates		
Dimension(mm)	430x320x250mm(LxWxH)		
Net weight(without rotor)	18KG		



No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12x15/10/5ml	6000r/min	4387xg	PP/PC tube
NO.2	Angle rotor	6x50ml			Injection syringe or PRP tube
	Adapter	6x30ml			
		6x20ml	4000r/min	2268xg	
			6x10ml	4000171111	2266XY
		6x5ml			
No.3	Angle Rotor	8x8/10ml	2700r/min 6 2400r/min 5 2700r/min 6 3000r/min 8	47xg 4min 93xg 4min	CGF special rotor and program



# PRP/A-PRF/I-PRF Multi-purpose Centrifuge

### **DS-P450**

### • 0

### **Product Overview**

The DS-P450 Low-Speed PRP Centrifuge is designed for separating and purifying materials based on their density and size. Widely used in scientific and medical research, these centrifuges are essential for understanding various biological and chemical processes. They find applications in diverse fields such as blood serum analysis, SPA treatments, plasma processing in Cosmetic Salons, as well as urea separation in hospital clinics and biochemistry laboratories.



### • 0

### **Product Features**

- 1. chamber for resistance against disinfectants.
- 2. Lid features an observation window for speed calibration and noise measurement.
- 3. Microprocessor control with frequency conversion A.C. motor drive.
- 4. Digital display shows Speed, Timer, RCF, Rotors, Program(Memory), Acceleration & Deceleration data, and Error codes.
- 5. Double layers sealing ring ensures excellent lid and instrument sealing.
- 6. Primarily designed for PRP/CGF/A-PRF/I-PRF tests, accommodating 10ml injection syringes, 5ml/8ml/10ml tubes, etc.
- 7. Special built-in variable speed programs for PRP/CGF/A-PRF/I-PRF tests, with easy retrieval, and usercustomizable programs.

### 8. User-Friendly Features:

- 9. Programmable and storable, storing up to 30 programs with one-touch access. Stored parameters remain even after centrifugation is turned off.
- 10. 10 acceleration rates and 10 braking ramps prevent secondary sedimentation, enhancing centrifugation efficiency.
- 11. Automatic lid-locking and holding during rotor operation.
- 12. Easily interchangeable rotors with a special connector for convenient loading and unloading.
- 13. Automatic troubleshooting with on-screen error codes and alarms.
- 14. "Mute" patent technology ensures noise levels lower than 58 decibels at the highest rotational speed.
- 15. Automatic rpm/rcf conversion simplifies operation.
- 16. Rotor identification system prevents rotor overspeeding with coded rotor identification.
- 17. Safety Features:
- 18. Manufactured according to international safety standards (e.g., IEC 61010).
- 19. Safety Electrical lid interlock prevents door opening during rotor operation; the machine won't run if the lid is open, displaying error codes.
- 20. Emergency lid-lock release during power failures for added safety.
- 21. Gas hinge protects against lid drops.
- 22. Safety mechanisms against overspeed, overheating (motor, chamber), imbalances, ensuring user-machine safety.



MODEL NO	DS-P450		
Speed range(rpm)	0-4000rpm adjustable		
Max Capacity(ml)	8*15ml		
RCF range (xg)	0-1900xg adjustable		
Noise(dBA)	≦50dB(A)		
Power supply	AC220V,50HZ-60Hz,5A,100W		
Time range	1-99minutes 59s adjustable		
Speed accuracy	±10r/min		
Motor	Brushless DC Motor		
Dimension(mm)	280x260x200mm(LxWxH)		
Net weight(without rotor)	10KGS		

No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	8x15/10/5ml	4000r/min	1900xg	PP/PC tube



# PRP/CGF/A-PRF/I-PRF Multi-purpose Centrifuge DS-5B

### • 0

### **Product Overview**

The DS-5B Low Speed Centrifuge is vital in scientific and medical research. It separates materials based on density and size, enabling the study of biological and chemical processes. Widely used in orthopedics, pain, surgery, and medical cosmetology, it facilitates research on PRP/ACT, aiding tissue recovery, reducing postoperative complications, preventing infections, and rejuvenating skin.



### • 0

- 1. Autoclave-able metal housing and stainless steel centrifuge chamber, resistant to detergents and disinfection liquids.
- 2. Observations window on the lid for speed calibration and noise measurement.
- 3. Microprocessor control with frequency conversion A.C. motor drive.
- 4. LCD display showing Speed, Timer, RCF, Rotors, Program(Memory), Acceleration & Deceleration information, and Error code information.
- 5. Double-layer sealing ring for excellent lid and instrument sealing.
- 6. 25 stored programs, transferable among RPR, CGF, APRF, IPRF.
- 7. Built-in variable speed program suitable for 60ml/20ml/10ml/8ml injection syringe or PRP separation.
- 8. Swing buckets, adapters, or rotors sterilizable by high temperature.
- 9. Compliance with international safety regulations (e.g., IEC 61010).
- 10. Safety Electrical lid interlock prevents door opening when the rotor is running; the machine won't run if the lid is open and displays an error code.
- 11. Emergency lid-lock release during power failures.
- 12. Gas hinge for lid drop protection.
- 13. Safety measures for overspeed, overheating (motor, chamber), imbalance, ensuring user safety.

MODEL NO	DS-5B		
Speed range(rpm)	0-6000rpm adjustable		
Max Capacity(ml)	8*100ml		
RCF range (xg)	0-4588xg adjustable		
Noise(dBA)	≦58dB(A)		
Power supply	AC220V,50HZ,10A,570W		
Timerange	1-99minutes 59s adjustable		
Speed accuracy	±10r/min		
ACC/DEC	1-10 rates		
Dimension(mm)	580x440x360mm(LxWxH)		
Net weight(without rotor)	40KG		



No.	ltem	Max. capacity	Max.speed	Max.RCF	Note
NO.1	Angle rotor	12x15/10/5ml	6000r/min	4588xg	PP/PC tube
NO.2	Swing rotor	steel frame rotor 4x100ml			PP/PC tube
	Swing frame	4x100ml	-		PP/PC tube PP/PC tube
	Adapter	4x50ml	-		
	0	4x30ml	4000r/min	3041xg	PP/PC tube
		4x20ml			PP/PC tube
		4x8/10ml			PP/PC tube
NO.3	Swingrotor	steel frame rotor 4x2x100ml			Injection syringe or PRP tube
	Swing frame	4x2x100ml			
	Adapter	4x2x50ml	4000r/min	3041xg	
	$\circ$	4x2x30ml	]		PP/PC tube
		4x2x20ml			
		4x2x8/10ml			
No.4	Angle Rotor	8x8/10ml	2400r/min 2700r/min	693xg 2min 547xg 4min 693xg 4min 856xg 3min	CGF special rotor and program



# Multi-functional Cell Washing Centrifuge **DS-450**

### • 0

### **Product Overview**

The DS-450 Cell Washing Centrifuge is designed specifically for lymphocyte cleaning in HLA examinations and red blood cell cleaning for freezing experiments within laboratory settings. Ideal for laboratories conducting HLA examinations and freezing experiments, this centrifuge ensures precise and effective cell washing, essential for accurate outcomes. Its multifunctional design caters to diverse applications in the medical and biochemical domains, making it a versatile choice for laboratories requiring efficient cell washing capabilities.



### • 0

- 1. **Robust Construction**: High-quality steel structure with built-in blast-proof steel chamber and autoclave-able 304# stainless steel chamber for resistance against detergents and disinfection liquids.
- 2. Efficient Drive System: Frequency conversion motor drive with microprocessor control, utilizing a flexible shaft drive system for smooth operation, minimal vibration, and low noise.
- 3. Convenient Monitoring: LED screen displays Speed, Timer, RCF, Rotors, Program(Memory), Acceleration& Deceleration information, and Error codes.
- 4. **Program Flexibility:** Pre-programmed settings with memory for lymphocyte cleaning and red blood cell separation. Ten speed stages with rapid acceleration (7 seconds) and deceleration. Fast shutdown in just 5 seconds.
- 5. Seamless Operation: Equipped with double-layer silicone seal rings for effective sealing. Automatic lid-locking and holding during rotor operation. Easily exchangeable rotors with a special connector for quick loading and unloading.
- 6. Diagnostic System: Self-diagnostic system integrated with high-strength chamber-coating and protective features. Automatic rpm/rcf conversion for enhanced convenience.
- 7. Effortless Operation: Automatic lid-locking and holding during rotor run. Easily interchangeable rotors with a special connector for swift loading and unloading.
- 8. Diagnostic Intelligence: Self-diagnostic system with robust chamber-coating and protective measures. Automatic rpm/rcf conversion simplifies operation.
- 9. Operational Safety: Automatic lid-locking and holding during rotor run. Special rotor connector ensures secure loading and unloading.
- **10. Protective Coating:** Self-diagnostic system includes a high-strength chamber-coating and protective features for enhanced safety. Automatic rpm/rcf conversion enhances operational safety.

MODEL NO	DS-450
Speed range(rpm)	0-4500rpm adjustable
RCF range (xg)	0-2000xg adjustable
Motor	Inverter motor direct drive
Noise(dBA)	≦55dB(A)
Power supply	AC220V,50HZ,5A,200W
Max Capacity(ml)	12x15ml
ACC/DEC	1-10 rates
Dimension(mm)	430*320*220mm
Net weight(without rotor)	18KG



For lymph ball cle	aning	-			-	-
Rotor Name	Program	Capacity	Speed r/min	RCF xg	Centrifugal time (variable range)	Applications
White blood cell washing rotor	P1	12×2ml	4500	2000	180seconds (30~300seconds)	Isolation of lymphocytes, isolation of cultured cells
	P2	12 $ imes$ 1.5ml	3200	1000	3 seconds	Platelet removal
	P3	12 $ imes$ 0.5ml	3200	1000	60 seconds (30~120seconds)	Cleaning of the lymphatic bulb
		Re	ed blood ce	ell washing rotor	•	
Rotor Name	Program	Capacity	Speed r/min	RCF xg	Centrifugal time (variable range)	Applications
Red blood cell washing rotor	Ρ4	12×2ml	2100	500	60 seconds (30~120seconds)	Bloodgroup determination, blood clotting reaction observation
	P5	12×2ml	3200	1000	15 seconds (5~15seconds)	Cross-fit test, antiglobulin test
	Р6	12×2ml	3200	1000	60seconds (30~120seconds)	Washing of blood cells, extraction of serum and plasma from dissociated solutions
Angle Rotor	P7	12×15-10- 5ml	3200	1247	60 seconds (30~120 seconds)	Cross-matching blood test



### **Blood Bank Centrifuge for Blood Type Cards**

### **DS-24**

### • 0

### **Product Overview**

The DS-24 Blood Type Card Centrifuge is a floor-standing unit capable of accommodating 4×12 blood type cards in a single cycle.

#### • 0



- 1. The Centrifuge DS-24 features a robust steel structure with a built-in blast-proof chamber and autoclavable 304 stainless steel components, resistant to detergents and disinfectants.
- 2. Control and Display: Equipped with a microprocessor control system and a flexible shaft drive for smooth, low-vibration, and low-noise operation. The machine features a frequency conversion motor drive, microcomputer control, and a touch color large screen display for intuitive operation.
- 3. Programmable and storable, accommodating up to 30 programs with one-touch saving. Stored parameters remain even after the machine is switched off.
- 4. Offers 10-speed acceleration and deceleration curves, enhancing centrifugation efficiency and preventing secondary sedimentation.
- 5. Automatic lid-locking and holding during rotor operation, ensuring user safety.
- 6. Self-diagnostic system with a high-strength chamber coating for enhanced protection.
- 7. "Mute" patented technology ensures low noise levels, below 58 decibels at the highest speed operation.
- 8. Automatic rpm/rcf conversion for accurate results.
- 9. A detailed machine operation panel/screen photo is required here.
- 10. Manufactured in compliance with international safety regulations (e.g., IEC 61010).
- 11. Safety electrical lid interlock prevents door opening when the rotor is running; the machine won't operate if the lid is open, displaying an error code.
- 12. Emergency lid-lock release in case of a power failure.
- 13. Gas hinge provides lid drop protection.
- 14. Multiple safety features are incorporated, including protections against over-speed, over-heating (motor, chamber), and imbalance, ensuring user-machine safety.

	MO	DELNO		D	S-24	
Speed range(rpm)				0-4000rpm adjustable		
	Max C	apacity(ml)		4*1	2 cards	
		Motor		Inverter mo	tor direct drive	
	AC	CC/DEC		1-1	0 rates	
	Dime	nsion(mm)		720*620*8	90mm(LxWxH)	
	Pow	ver supply		AC220V,50HZ,15A,1050W		
	RCF	range (xg)		0-2773xg adjustable		
	No	ise(dBA)		≦58 dB(A)		
	C	Control		Microprocessor control		
	P	rogram		30		
Net weight				13	35 KG	
No.	Rotor	Capacity	Max. speed	Max.RCF	Note	
NO.1	Swing				12 cards/ box for swing	

NO.	Rotor	Capacity	Max. speed	Max.RCF	Note
NO.1	Swing rotor	4×12cards	2000r/min	821xg	12 cards/ box for swing bucket
NO.2	Microplat e rotor	4×2×96hole			Square cup 4*2*96shallowwell plate
1	Adapter		4000r/min	2978xg	4*1*96deep well plate
		4*32*1.5ml			PP/PC tube



DARSUN

# Gerber Centrifuge DS-50

### • 0

### **Product Overview**

The Gerber centrifuge DS-50, is primarily utilized in the dairy industry to determine milk fat content. However, its applications extend beyond milk testing. Widely employed in various sectors, it efficiently separates fluids like blood, urine, and industrial liquids into their constituent elements. In the pharmaceutical industry, this device is crucial for purifying proteins, enzymes, and biomolecules.

Designed specifically for dairy fat analysis, the Gerber milk fat centrifuge offers versatility. It employs four testing methods: Geber, Ross, Pasteur, and solubility methods. Notably, it incorporates a heating function that maintains the milk fat tube's temperature above 50°C during centrifugation. This feature not only reduces sample water bath time but also enhances the reliability of test results.

### • 0

- 1. Durable Construction: Metal housing, lid, and 304# stainless steel centrifuge chamber are autoclave-able and resistant to detergents and disinfection liquids.
- 2. Microprocessor control with frequency conversion A.C. motor drive.
- 3. Large color screen displays rotor number, speed, time, temperature, centrifugal force, acceleration, deceleration rate, and fault information.
- 4. Double layers sealing ring ensures excellent sealing for the centrifuge lid and the instrument.
- 5. Ring heater provides quick and uniform heating, with precise temperature control and constant temperature function, meeting experimental temperature requirements.
- 6. Specially designed glass centrifuge tube sampling technology prevents breakage during operation.
- 7. Fault self-diagnosis system detects over-speed, over-heating, unbalanced alignment faults and displays information on the screen, enhancing instrument safety.
- 8. Low noise level, less than 58 decibels at the highest rotational speed.
- 9. Manufactured in compliance with international safety regulations Safety Electrical lid interlock prevents door opening when the rotor is running; machine won't operate if the lid is open, displaying an error code.
- 10. Emergency lid-lock release in case of power failure.
- 11. Gas hinge provides lid drop protection.
- 12. Safety features prevent over-speed and imbalance, ensuring user-machine safety.

MODEL NO	DS-50		
Speed range(rpm)	0-2000rpm adjustable		
Max Capacity(ml)	8*30ml gerber tube		
Display	LCD		
Noise(dBA)	60dB(A)		
Temperature	+35°C80°C		
Dimension(mm)	600x476x370mm		
Speed accuracy	±10rpm		
RCF range (xg)	890xg		
Time range	0-99minutes 59 s		
Acceleration /Deceleration rates	09		
Motor	Frequency Converter motor		
Power supply	AC220V,50HZ,15A,2000W		
Net weight(without rotor)	50KGS(rotor excluded)		

No.	ltem	Capacity	Max.speed	Max.RCF	Note
NO.1					
	Angle rotor	8×30ml	2000r/min	890xg	PP/PC tube





# Microplate Centrifuge

# **DS-450**

• 0

### **Product Overview**

The DS-450 bench top micro plate centrifuge seamlessly integrates cutting-edge technology with substantial capacity.

### • 0



- 1. LED display for easy parameter adjustment during operation, featuring a user-friendly program design. Customizable modes such as short spin, timed cycles, and rotational speeds ensure efficient and stable tests.
- 2. Impulse centrifugation provides instant acceleration to the desired speed, with automatic braking and fast shutdown for added safety.
- 3. Equipped with a maintenance-free DC brushless motor, allowing rapid acceleration and deceleration, enabling quick and efficient centrifugation of multiple samples.
- 4. Compact and uniquely designed, the centrifuge is user-friendly, allowing easy handling of microplates. The lid opens up to 90° for convenient access.
- 5. Efficiently disperses hanging liquids on tube walls before or after PCR tests, significantly enhancing test accuracy.
- 6. Manufactured in compliance with international safety regulations,
- 7. Safety features include an electrical lid interlock preventing door opening while the rotor is running. The machine will not operate if the lid is open, displaying an error code.
- 8. Emergency lid-lock release function activates in case of a power failure.
- 9. Equipped with a gas hinge for lid drop protection.
- 10. Various safety protections, including overspeed mechanisms, are integrated to ensure user and machine safety.

MODEL NO	DS-450		
Speed range(rpm)	0-3000rpm adjustable		
Max Capacity(ml)	2x96 well PCR plate / microplate,24x8x0.2ml PCR strip tube, 192x0.2ml PCR tube		
Display	LCD		
Dimension(mm)	230x195x195mm		
Speed accuracy	±10rpm		
RCF range (xg)	0-600xg adjustable		
Time range	Short spin/ 1 $\sim$ 99 seconds/ 1 $\sim$ 99 minutes		
Motor	Frequency Converter motor		
Power supply	DC 24V power adapter (AC 100~230V 50/60Hz 5A), 55W		
Net weight(without rotor)	3.9 KGS		

No.	ltem	Capacity	Rotational speed	Max.RCF	Note
NO.1	Adapter	24×8×0.2ml	3000r/min	600xg	PCR tube-strip or 0.2ml PCR tube



000:00

# Blood Banking Centrifuge DS-12K

### • 0

### **Product Overview**

The DS-12KBlood Banking Centrifuge, Ideal for Blood Cross-Matching, Blood Group Identification, and Antibody Screening. A Precise and Reliable Solution for Blood Bank Professionals

### • 0

#### **Product Features**

### 1. Efficient Design:

- 2. High-quality steel structure with a blast-proof steel chamber and autoclave-able 304# stainless steel chamber for durability.
- 3. Inverter motor direct drive ensures accurate control, low noise, and stable operation.
- 4. Advanced CPU control system with precise time settings and dynamic display of time, speed, and centrifugal force.
- 5. Program with Memory Functionality:
- 6. Equipped with 6 sets of centrifugation programs and ten speed rates, meeting blood bank cross-matching and specimen separation standards.
- 7. Quick stop function reaches limit speed in 7 seconds and stops within 5 seconds, enhancing efficiency.
- 8. User-Friendly Operation:
- 9. Automatic lid-locking and holding during rotor run for added safety.
- 10. Self-diagnostic system with high-strength chamber-coating and protective features.
- 11. "Mute" patented technology ensures quiet operation, with noise levels below 55 decibels.
- $12. \ \ \, Automatic \ rpm/rcf \ conversion \ simplifies \ the \ process.$
- 13. Safety First:
- 14. Compliance with international safety regulations, including IEC 61010 standards.
- 15. Safety electrical lid interlock prevents opening during rotor operation; machine won't run if the lid is open, displaying an error code.
- 16. Emergency lid-lock release in case of power failure.
- 17. Gas hinge provides lid drop protection.
- 18. Safety features prevent over-speed, imbalance, ensuring user and machine safety.

MODEL NO	DS-12K
Max speed	5000r/min
Speed accuracy	±10r/min
Motor	Inverter motor direct drive
Noise	< 55dB
Dimension(L×W×H)	430×320×220mm
Max RCF	3186xg
Max Capacity	12x15ml
ACC/DEC	1-10 rates
Power Supply	AC 22050Hz 10A
Net Weight	22kg

No.	Rotor	Capacity	Speed	RCF	Remark
NO.1	Angle rotor	12×15-10-5ml			
	Adaptor	12×2ml	5000r/min	3186xg	Standard Cross-matching blood test



### Cell Smear Centrifuge(Cytocentriuge/Cytospin) DS-6

### O Product Overview

Samples collected through cervical brushing are separated from impurities through gradient centrifugation. The effective diagnostic components (cells and bacteria) are then processed into a flat, uniform layer without overlapping using DS-6 Cell Smearcentrifuge. This ultra-thin layer is absorbed onto glass slides for examination under a microscope or computer reading. Twelve samples can be prepared within 5 minutes. It's user-friendly, pollution-free, and ensures an even cell layer even against a clear background.



### • 0

### **Product Features**

The centrifuge features a metal housing, metal lid, and stainless steel centrifuge chamber, all autoclave-able and resistant to detergents and disinfection liquids.

Controlled by a microprocessor with a frequency conversion A.C. motor drive for precision operation.

The LCD display shows various parameters such as speed, timer, RCF, rotor programs (memory), acceleration, deceleration information, and error codes.

To ensure a secure seal, the centrifuge is designed with a double-layer sealing ring for both the lid and the instrument.

Enhanced bio-safety measures include a gas-tight rotating head sterilizable at high temperatures and a centrifugal cavity with ultraviolet sterilization function. The centrifuge enters sterilization mode upon startup.

MODEL NO	DS-6		
Speed range(rpm)	0-1200rpm adjustable		
Control	Microprocessor control		
Max Capacity(ml)	12 cell slide clips		
Time Range	0-99min		
RCF range (xg)	0-241xg adjustable		
Power supply	AC220V,50HZ,5A,60W		
Noise(dBA)	≦55 dB(A)		
Motor	Inverter motor direct drive		
Height of Cell Slide Clips	50mm		
Dimension(mm)	440*400*230mm		
Net weight(without rotor)	22KG		

No.	Rotor	Capacity	Max. speed	Max. RCF	Note
NO.1	Swing rotor	12 cell slide clips 2ml/clip	1200r/min	241xg	Swing rotor of settlement type



# **Cell Smear Centrifuge**

# DS-8

• 0

### **Product Overview**

The Cytospin Cell Smear Centrifuge DS-8 offers impressive features for efficient cell processing.

The Cell Smear Centrifuge DS-8 streamlines the production of thin layers for cervical cells, pleural effusion cells, cerebrospinal cells, bronchial lavage fluid cells, needle aspirating cells, and sputum cells.

Utilizing samples collected with a cervical brush, this centrifuge employs gradient centrifugation to separate impurities.

The effective diagnostic components, cells, and bacteria are then arranged into a flat, uniform layer without overlap. This ultra-thin layer adheres to a glass slide for microscopic examination or computer analysis. Remarkably, 12 samples can be processed in just 5 minutes. Simple to operate and environmentally friendly, this centrifuge ensures an even cell layer against a clear background.

Designed for applications in pathology, hematology, microbiology, and biological research, the Cell Smear Centrifuge is a vital tool for concentrating cells from liquid samples onto microscope slides. Its versatility extends to various specimen types, including fine needle aspirations, cerebrospinal fluid, serous fluid, synovial fluid, and urine.



#### • 0

### **Product Features**

Microprocessor control and flexible shaft drive system ensure smooth, low-vibration, and quiet operation Equipped with frequency conversion motor drive and a user-friendly touch color large screen display

Produces 12 samples in just 5 minutes, ensuring a pollution-free process and even cell layers against a clear background "Mute" patented technology ensures quiet operation, with noise levels less than 55 decibels

Automatic rpm/rcf conversion for accurate processing

Complies with international safety regulations, featuring electrical lid interlock and emergency lid-lock release in case of power failure

Safety protections include electronic door lock, over-speed prevention, and fault auto-diagnosis, ensuring user and machine safety

LED display shows Speed, Timer, RCF, and Program (Memory) information, and a window on the lid facilitates speed calibration and noise measurement.

	MODEL N	0	DS-8			
	Speed range(r	·pm)	0-3500rpm adjustable			
	Max Capacity	(ml)		12 cell slide clips		
	Control		М	icroprocessor con	trol	
	Time Rang	e		0-99min		
	Power supp	ly	A	C220V,50HZ,5A, 6	50W	
	RCF range (>	(g)		0-1328xg adjustat	ble	
	Noise(dBA	.)	≦55dB(A)			
	Motor		Inverter motor direct drive			
	Dimension(m	nm)	430*320*250mm			
Ne	et weight(witho	ut rotor)	18KG			
No. Rotor Capacity			Max. speed Max. RCF Not		Note	
NO.1	Swing rotor	12 cell slide clips	3500r/min	1328xg	Round disc vertical rotor	



### Cell Smear Centrifuge(Cytocentriuge/Cytospin)

### **DS-12**

### • •

### **Product Overview**

Cell Smear Centrifuge/cytocentrifuge/ cytospin, can be used to transfer any sedimentable particles from liquid suspension onto a microscope slide so that they can be stained and examined, but is primarily used to transfer biological cells.

It is widely used in clinical medicine and biological research. The literature of clinical applications is extensive and includes such specimens as cerebrospinal fluid, synovial fluid, urine, fine needle aspirates, and a variety of body fluid and lavage samples.



### • 0

- 1. Working Principle:Collect the specimen with official neck brush, separate the impurities by gradient centrifugation, and then the effective diagnostic components (cells, bacteria) through the centrifugal preparation, so that the cells are uniform and non-overlapping, ultra-thin layer adsorption on the slide, microscopic examination or computer reading film.
- 2. Main items: cervical cell thin-layer preparation, pleural fluid cell thin-layer preparation, cerebrospinal fluid cell thin-layer preparation, bronchial lavage fluid cell thin-layer preparation needle aspiration cell thin-layer preparation, sputum cell layer preparation.
- 3. It is equipped with multilevel protection functions such as overspeed, fault auto-diagnosis, electronic safety door lock, etc. to ensure the safety of man-machine.12 specimens can be made in 5 minutes, easy and convenient operation, no pollution, uniform cell smear, clear background.

MODEL NO	DS-12		
Speed range(rpm)	0-1200rpm adjustable		
Control	Microprocessor control		
Max Capacity(ml)	20 cell slide clips		
Time Range	0-99min		
RCF range (xg)	0-436xg adjustable		
Power supply	AC220V,50HZ,5A,200W		
Noise(dBA)	≦55 dB(A)		
Motor	Inverter motor direct drive		
Height of Cell Slide Clips	50mm		
Dimension(mm)	560*650*250mm		
Net weight(without rotor)	27KG		

No.	Rotor	Capacity	Max. speed	Max. RCF	Note
NO.1	Swing rotor	20 cell slide clips	1200r/min	436xg	Swing rotor of settlement type



# Centrifuge for Blood Gel Card/Blood ID-Card DS-12B/24B

### • O Product Overview

The DS-12B/24B blood gel card desktop low-speed centrifuge is a vital tool in blood-related testing. It utilizes micro column gel technology, widely used in blood serology, serum detection, red blood cell washing, and microcolumn gel immunoassays. Equipped with a 12/24 card rotor, this centrifuge meets standard operational requirements for batch processing. Its microcomputer control and automatic imbalance detection technology ensure easy operation and precise results. Ideal for experimental hematology in hospitals and blood banks, this centrifuge is indispensable in crucial tests like Blood Group Identification, Blood Cross-Matching, and Irregular Antibody Screening. When paired with a gel card incubtor, it ensures optimal performance throughout the testing process.



### • 0

### **Product Features**

- 1. The Blood Gel Card Centrifuge Machine operates on the principle of microcolumn gel immunoreaction, specifically the red blood cell agglutination test or microcolumn gel hemagglutination assay (MGHA). In this process, red blood cells and their corresponding antibodies clump together within the microcolumn gel tube. Through low-speed centrifugation, the clots are positioned on the surface or within the gel, while unbound red blood cells settle at the bottom of the tube.
- 2. Advantages:
- 3. Micro Column Gel Technology offers simplicity, eliminating the need for washing and confirmation tests for negative results, overcoming the complexity and time constraints of traditional Coombs tests. It establishes the incomplete antibody detection theory as the clinical "gold standard". The system can process multiple specimens simultaneously (12/24 cards), enabling efficient testing of numerous clinical samples. Additionally, it ensures accuracy, sensitivity, minimal specimen usage, long-term result storage, easy standardization, and safe operation.
- 4. Paternity Testing Method:
- 5. The Paternity Testing Method utilizes ABO blood type positive and negative type as well as RhD blood type test cards to detect human ABO and RhD antigens. It employs the column agglutination method (microcolumn gel method), a standardized immunological approach where red blood cell antigens and corresponding antibodies agglutinate within a microcolumn gel medium. This method ensures result accuracy due to its standardization and quantification.

#### 6. Process Steps:

- 7. Blood Sample Collection: Collect blood samples (Note: samples with abnormally high serum protein should be adequately washed before use).
- 8. Blood Sample Processing:Centrifuge the anticoagulated whole blood at 900~1000g for 5 minutes. The lower layer contains concentrated packed red blood cells (about 80% concentration). Carefully separate the upper plasma into another test tube for direct use in experiments



MODEL NO	DS-12B/24B		
Speed range(rpm)	0-3500rpm adjustable		
Motor	Frequency conversion A.C. motor		
Display	LCD		
Time Range	0-99min		
RCF range (xg)	0-1610/2030xg adjustable		
Power supply	AC220V,50HZ,5A,60W		
Max Capacity(ml)	24cards		
Speed accuracy	±10r/min		
Noise(dBA)	≦50 dB(A)		
Dimension(mm)	430*320*250mm(12 cards) 440*400*230mm(24 cards)		
Net weight	13 KG (with 12 cards); 19KG (with 24 cards)		

No.	ltem	Capacity	Rotational speed	Max.RCF	Time	Note
NO.1	Pre-centrifuge program group	12 cards	3500r/min	1232xg	1 minute	
NO.2	IO.2 Test program group		900r/min	81xg	2 minutes	
			1500r/min	226xg	3 minutes	Program group can be set for different blood type
NO.1	Pre-centrifuge program group	24 cards	3500r/min	1554xg	1 minute	cards.
NO.2			800r/min	81xg	2 minutes	
	Test program group	24 cards	1335r/min	226xg	3 minutes	