

BLOOD BANK REFRIGERATED CENTRIFUGE

The range of Blood component separation equipment and Hi-Volume Centrifuges are designed for Blood bags, large capacity centrifuge tubes and bottles. These centrifuges are mainly used in chemical and pharmaceutical processing, Biotech Labs, Blood Banks etc. where large volume tubes, bottles and blood bags are used.

MP 6000 R

Features

- Microprocessor controls
- 99 program memory
- Brush less induction motor drives
- CFC free cooling system

Programmable Features:

- Speed control up to 5000 RPM with 10 RPM increment
- Temperature in the range - 20°C to +40°C with 1°C working temp range -5°C to 20°C.
- Preset timer range 1 to 120 minutes with 1 minute increment & infinite mode.
- User programmable Acceleration and deceleration time range from 50 seconds to 450 seconds.

Other Features, Displays & safety Systems:

- Continues read out of working RCF Value.
- Pre-cooling and standby cooling facility.
- Programmed Emergency lid lock release in case of power failure.
- Safety lid open.
- Imbalance indication and safety switch off mechanism.
- Hydraulic hold for lid
- Mechanical and Electronic lid lock with indicator
- Floor model heavy duty unit with epoxy coated body and stainless steel chamber.

Dimensions:

- Dimension (W x D x H) mm: 860 x 960 x 965.

Technical Data (MP 6000 R)

(W) 860 mm x (D) 960 mm x (H) 965 mm

Weight : 285 kg, Connected Load : 10 KVA

Max. Speed: 4800 RPM, Max. RCF: 6000 xg.

Max. Tube Size: 500 ml, Max. Capacity : 6000 ml.

Swing Out Rotor Heads and carriers for Blood Bank Applications suitable for Centrifuge Model MP 6000 R

| Model | Cap./ml | RPM | RCF xg |
|---------------------|---|------|--------|
| MP 6000 + MP 6001 A | 12 Blood Bags of 450 ml (Triple Bag System) | 4500 | 6000 |
| MP 6001 + MP 6001 B | 6 Blood Bags of 450 ml (Triple Bag System) | 4500 | 6000 |
| MP 4001 + MP 4001 A | 8 Blood Bags of 450 ml (Triple Bag System) | 4800 | 5650 |
| MP 4001 + MP 4001 B | 4 Blood Bags of 450 ml (Triple Bag System) | 4800 | 5650 |



HIGH VOLUME CENTRIFUGE FOR RESEARCH & BIOTECHNOLOGY

The range of Hi-Volume Centrifuges are designed for large capacity centrifuge tubes, bottles and blood bags. These centrifuges are mainly used in chemical and pharmaceutical processing, Biotech Labs, Blood Banks etc. where large volume tubes, bottles and blood bags are used.

RC 7500

Features

- This versatile unit has speed ranges of up to 5000 RPM
- The control panel incorporate step less speed control. Digital speed meter.
- The Centrifuge is provided with CFC Free Cooling system.
- The unit is provided with control panel comprising autovariac speed control
- Digital speed indicator
- 1-99 minutes Digital timer cum indicator with Alarm at automatic switching off.
- Dynamic brake, Digital Temp. control cum indicator with a range of -2°C to +40°C
- Specially designed cooling system allow pre-cooling of rotor head and also allow the cooling system to work even when the centrifuging operation is complete, thereby eliminating damage to heat sensitive material.

Safety:

- Zero start interlock
- Lid locking switch
- Unbalance safety cutoff
- Gas spring fitted fail safe door.

Design:

- Heavy Duty floor model unit suitable for varying centrifuge applications in Blood banks, Clinical laboratories, chemical and pharmaceutical industries, biotechnology and research institutions.
- The centrifuge chamber is made of stainless steel and is effectively insulated and separated form other parts.

MP 4500

- Floor model centrifuge is heavy duty unit fabricated from steel and epoxy coating.
- Microprocessor controls provided has 99 program memory.
- Brush less induction motor drives.
- The microprocessor control is provided with programmable variable speed control up to 5000 R P M with 10 RPM increment.
- Continues read out of working RCF Value.
- 1 to 120 minutes timer programmable in 1 minute increment with infinite mode.
- User programmable Accelerati na and deceleration time range from 40 seconds to 450 seconds.
- Mechanical and Electronic lid lock with indicator.
- Imbalance indicator and LCD display of set and working parameters.
- Gas spring fitted fail safe door.

Technical Data (RC 7500 & MP 4500)

RC 7500: (w) 860 mm x (D) 960 mm x (H) 965 mm, Weight 285 kg

MP 4500: (w) 750 mm x (D) 850 mm x (H) 905 mm, Weight 200 kg

Connected Load : 4 kVA

Max. Speed: 4500 RPM, Max. RCF 6150 xg,

Max. Tube Size: 1500 ml, Max. Capacity: 7500 ml.



Swing Out Rotor Heads and carriers for Blood Bank Applications suitable for Centrifuge model RC 7500

| Model | Cap./ml | RPM | RCF xg |
|--------------------|--|------|--------|
| SC 7501W + 7501 AW | 6 Blood Bags of 450 ml (Triple Bag System) | 4500 | 5000 |
| SC 7504W + 7504 AW | 4 Blood Bags of 450 ml (Triple Bag System) | 5000 | 6150 |

Swing Out Rotor Heads and carriers suitable for General Application in Centrifuge Model MP 6000R, RC 7500 and MP 4500

| Model | Cap./ml | MP 6000R | | RC 7500 | | MP 4500 | |
|------------------|----------------------|----------|------|---------|------|---------|-----|
| | | RPM | RCF | RPM | RCF | RPM | RCF |
| SC 7501+SC 7501A | 6x1250 Bottle | 2800 | 2700 | 2800 | 2700 | - | - |
| SC 7501+SC 7505 | 6x(4x100) ml Tubes | 3200 | 3300 | 3200 | 3300 | - | - |
| SC 7501+SC 7506 | 6x(8x50) ml Tubes | 3200 | 3300 | 3200 | 3300 | - | - |
| SC 7501+SC 7507 | 6x(24x1.5/2) ml Tube | 3200 | 3300 | 3200 | 3300 | - | - |
| SC 7501+SC 7508 | 6x(58x5) ml Tube | 3200 | 3300 | 3200 | 3300 | - | - |

Fixed Angle Rotor Heads suitable for use with Centrifuge Model MP 6000R, RC 7500 & MP 4500

| Model | Cap./ml | MP 6000R | | RC 7500 | | MP 4500 | |
|---------|---------|----------|------|---------|------|---------|------|
| | | RPM | FCF | RPM | RCF | RPM | RCF |
| SC 7701 | 6x500 | 4500 | 3850 | 4500 | 3850 | 4500 | 3850 |
| SC 7702 | 8x250 | 4500 | 3850 | 4500 | 3850 | 4500 | 3850 |
| SC 7703 | 12x100 | 4500 | 3850 | 4500 | 3850 | 4500 | 3850 |
| SC 7704 | 16x50 | 4500 | 3850 | 4500 | 3850 | 4500 | 3850 |
| SC 7705 | 36x25 | 4500 | 3850 | 4500 | 3850 | 4500 | 3850 |
| SC 7706 | 72x15 | 4500 | 3850 | 4500 | 3850 | 4500 | 3850 |

LABSPIN CENTRIFUGE

TC 450D

- Step less speed regulator.
- Digital speed indicator
- 1-99 minutes Digital timer & infinite mode.

TC 450S

- Programmable speed regulator with digital speed indicator.
- Digital display of working RCF value
- 1-99 minutes preset digital timer.
- Programmable Acceleration time.
- Imbalance safety cut off
- Safety Lid switch.

Choice of Rotor Heads

| Model | Cap./ml | Type | RPM | RCF xg |
|--------|---------|-------|------|--------|
| TC 451 | 8x15 | S/O | 4000 | 2400 |
| TC 452 | 8x15 | Angle | 5000 | 3450 |
| TC 453 | 4x50 | S/O | 4000 | 2400 |
| TC 454 | 4x50 | Angle | 5000 | 3650 |
| TC 455 | 12x15 | Angle | 4000 | 2950 |



MULTISPIN CENTRIFUGE

TC 650D

- Step less speed regulator.
- Digital speed indicator
- 1-99 minutes Digital timer & infinite mode.

TC 650S

Features

- Programmable speed control with digital speed indicator
- Digital display of working RCF value
- 1-99 minutes preset digital timer.
- Programmable Acceleration time.

Safety

- Safety Lid switch
- Imbalance safety cut off.

TC 650F

Features

- Brushless low noise AC Induction Motor with variable frequency drive.
- LCD Display of Speed & time.
- 1-120 minutes Digital timer & infinite mode.
- Programmable Acceleration / deceleration - range 40 - 240 seconds
- Dynamic Brake
- Memory of last used program

Safety

- Imbalance detection & safety switch off.
- Safety Lid switch.

Technical Data

(TC 650D / TC 650S / TC 650F)

(W) 350 mm x (D) 440 mm x (H) 350 mm

Weight: 22 kg, Connected Load: 0.30 kVA,

Max. Speed: 5500 RPM, Max. RCF: 3950 xg,

Max. Tube Size: 50ml, Max. Capacity : 300 ml.

Choice of Rotor Heads

| Model | Cap./ml | Type | RPM | RCF xg |
|------------------------------------|---------|-------|------|--------|
| TC 652 | 16x15 | S/O | 4200 | 2900 |
| TC 653 | 12x15 | S/O | 4200 | 2900 |
| TC 654 | 8x15 | S/O | 4300 | 3250 |
| TC 655 | 6x50 | S/O | 4350 | 2950 |
| (Also accepts Mac cartney Bottles) | | | | |
| TC 656 | 4x50 | S/O | 4200 | 3050 |
| TC 657 | 16x15 | Angle | 5200 | 3900 |
| TC 658 | 12x15 | Angle | 5500 | 3950 |
| TC 659 | 8x15 | Angle | 5500 | 3950 |
| TC 660 | 6x50 | Angle | 5100 | 3750 |
| TC 661 | 4x50 | Angle | 5500 | 3950 |



MICROSPIN CENTRIFUGE

TC 4815 D

- Step less speed regulator.
- Digital speed indicator
- 1-99 minutes Digital timer & infinite mode.

TC 4815 S

Features

- Programmable speed control with digital speed indicator
- Digital display of working RCF value
- 1-99 minutes preset digital timer.
- Programmable Acceleration time.

Safety

- Safety Lid switch
- Imbalance safety cut off.

TC 4815 F

Features

- Brushless low noise AC Induction Motor with variable frequency drive.
- LCD Display of Speed & time.
- 1-120 minutes Digital timer & infinite mode.
- Programmable Acceleration / deceleration - range 40 - 240 seconds
- Dynamic Brake
- Memory of last used program

Safety

- Imbalance detection & safety switch off.
- Safety Lid switch.

MP 300

Features

- Micro Processor Control
- Brush less low noise AC Induction motor & variable frequency drive.
- LCD Display
- Soft Touch keyboard
- 99 program memory
- Speed with 10 RPM increment
- Timer with 1 minute increment
- Programmable Acceleration / Deceleration (range 60-720 seconds)
- Selector switch for display of working speed/RCF value
- Other indicators: remaining time, rotor in motion, imbalance, safety lid open.
- Higher capacity rotor heads can be designed as per your requirement.

Safety

- Safety Electrical and Mechanical lock with programed emergency release mechanism.
- Imbalance detection & safety switch off.
- Safety Lid switch.

| Technical Data | MP 300 | TC 4815 D / S F |
|----------------------|-----------------|-----------------|
| Dimension (WxDxH) mm | 360 x 440 x 350 | 320 x 410 x 310 |
| Weight (Kg.) | 25 | 20 |
| Connected Load | 0.30 kVA | 0.30 kVA |
| Max. Speed (RPM) | 16000 | 16000 |
| Max. RCF x g | 17600 | 17600 |
| Max. Tube Size (ml) | 5 | 5 |
| Max. Capacity (ml) | 32 | 32 |



Choice of Rotor Heads

| Model | Cap./ml | Type | Type of Tube | RPM | RCF |
|---------|------------------------------|-------|--------------|-------|-------|
| TC 481 | 24x1.5/2 | Angle | Eppendorff | 12000 | 15250 |
| TC 482 | 24XPCR | Angle | Eppendorff | 12000 | 12800 |
| TC 483 | 30x04 | Angle | Eppendorff | 12000 | 12800 |
| TC 484 | 16x1 | Angle | Eppendorff | 12000 | 12800 |
| TC 485 | 8x3 | Angle | Eppendorff | 12000 | 12800 |
| TC 486 | 6x5 | Angle | P.P. (T.B.) | 12000 | 12800 |
| TC 487 | 8x4 | Angle | P.P. (T.B.) | 12000 | 12800 |
| TC 488 | 8x3 | Angle | P.P. (R.B.) | 12000 | 12800 |
| TC 489 | 8x2 | Angle | P.P. (R.B.) | 16000 | 17500 |
| TC 490 | 8x2 | Angle | Glass (R.B.) | 16000 | 17500 |
| TC 491 | 10x1 | Angle | Glass (R.B.) | 16000 | 17500 |
| TC 492 | 12x0.5 | Angle | Glass (R.B.) | 16000 | 17500 |
| TC 495 | Micro Haematocrite Capillary | | 12000 | 15500 | |
| TC 495R | Reading Device | - | | N.A. | N.A. |
| TC 496 | Micro Haematocrite Capillary | | | | |
| | 12x QBC-II Plus | | Carrier | 12000 | 15500 |

LOW SPEED RESEARCH CENTRIFUGE

TC 8100 D

- Step less speed regulator.
- Digital speed indicator
- 1-99 minutes Digital timer & infinite mode.
- Zero Start interlock
- Imbalance safety cut off
- Safety Lid switch
- Dynamic Brake

TC 8100 F

Features

- Brushless low noise AC induction motor with variable frequency drive.
- LCD display of speed & time
- 1-120 minutes Digital timer 7 infinite mode.
- Programmable Acceleration / deceleration - range 40-240 seconds.
- Dynamic Brake
- Memory of last used program.

Safety

- Imbalance detection & safety switch off.
- Safety Lid switch

MP 800

Features

- Micro processor control
- Brushless low noise AC induction Motor with variable frequency drive.
- LCD Display
- Soft Touch keyboard
- 99 program memory
- Speed with 10 RPM increment
- Timer with 1 minute increment.
- Programmable Acceleration / deceleration (range 60-720 seconds)
- Selector switch for display of working speed/RCF value.
- Other indicators: remaining time, rotor in motion, imbalance, safety lid open.

Safety

- Safety Electrical and Mechanical lock with programmed emergency release mechanism.
- Imbalance detection & safety switch off.
- Safety Lid switch.

Technical Data

(TC 8100 D / TC 8100 F / MP 800)

(W) 450 mm x (D) 590 mm x (H) 445 mm

Weight: 52 kg, connected load: 0.75 kVA

Max. Speed: 7000 RPM, Max. RCF: 7250 xg,

Max. Tube Size: 200 ml, Max. Capacity: 1200 ml

TC 8101 Swing Out Rotor Head without buckets

Buckets (carriers) suitable for use with TC 8101

Swing Out Rotor Head

| Model | Cap./ml | Max. RPM | Max. RCF xg |
|------------|--|----------|-------------|
| TC 8101 A | 4x200 | 5200 | 5050 |
| TC 8101 B | 4x100 | 6100 | 6600 |
| TC 8101 C | 4x18 RIA (5 ml) | 5200 | 4200 |
| TC 8101 V | 4x9 Vacutainer (2,3,4 & 5 ml) | 5200 | 4200 |
| TC 8101 VL | 4x9 Vacutainer 2x1 MTP | 5200 | 4200 |
| TC 8108 | 2x2 MTP 2x2 MTP (Micro Titer Plates) | 3400 | 1700 |
| TC 8109 | 4x250 | 5200 | 5050 |

Fixed Angle Rotor Head

| Model | Cap./ml | TC 8100 D | | TC 8100 F | | MP 800 | |
|-----------|----------|-----------|------|-----------|--------|--------|--------|
| | | RPM | RCF | RPM | RCF xg | RPM | FCF xg |
| TC 8102 | 12x25 | 7000 | 7100 | 7000 | 7100 | 7000 | 7100 |
| TC 8103 | 6x200 | 7000 | 7250 | 7000 | 7250 | 7000 | 7250 |
| TC 8104 | 8x100 | 7000 | 7100 | 7000 | 7100 | 7000 | 7100 |
| TC 8105 | 12x50 | 7000 | 7100 | 7000 | 7100 | 7000 | 7100 |
| TC 8106 | 36x15 | 7000 | 7100 | 7000 | 7100 | 7000 | 7100 |
| TC 4115 | 18x15 | - | - | 10000 | 10500 | 10000 | 10500 |
| TC 4111 | 24x1.5/2 | - | - | 10000 | 10500 | 10000 | 10500 |
| TC 8101 J | 4(4x15) | 4500 | 2780 | 4500 | 2780 | 4500 | 2780 |
| TC 8101 G | 4 (3x15) | 4500 | 2780 | 4500 | 2780 | 4500 | 2780 |
| TC 8101 I | 4(15x6) | 52000 | 5050 | 5200 | 5050 | 5200 | 5050 |
| TC 8110 | 4x250 | 7000 | 7250 | 7000 | 7250 | 7000 | 7250 |

Reduction Adaptors for use with Swing Out Rotor Carriers

| | | | |
|---------|---------------------------|---------|---------------------------|
| TC 8111 | 100 ml in 200 ml carrier | TC 8118 | 5x15 ml in 100 ml carrier |
| TC8112 | 50 ml in 200 ml carrier | TC 8116 | 25 ml in 100 ml carrier |
| TC 8114 | 7x15 ml in 200 ml carrier | Tc 8121 | 1x50 ml in 250 ml carrier |
| TC 8113 | 3x50 ml in 200 ml carrier | TC 8122 | 3x25 ml in 250 ml carrier |
| TC 8117 | 13x5 ml in 200 ml carrier | TC 8123 | 5x15 ml in 250 ml carrier |
| TC 8115 | 50 ml in 100 ml carrier | Tc 8124 | 13x5 ml in 250 ml carrier |

HIGH SPEED RESEARCH CENTRIFUGE

TC 4100 D

- Step less speed regulator.
- Digital speed indicator
- 1-99 minutes Digital timer & infinite mode.
- Zero Start interlock
- Imbalance safety cut off
- Safety Lid switch
- Dynamic Brake

TC 4100 F

Features

- Brushless low noise AC induction motor with variable frequency drive.
- LCD display of speed & time
- 1-120 minutes Digital timer 7 infinite mode.
- Programmable Acceleration / deceleration - range 40-240 seconds.
- Dynamic Brake
- Memory of last used program.

Safety

- Imbalance detection & safety switch off.
- Safety Lid switch

MP 400

Features

- Micro processor control
- Brushless low noise AC induction Motor with variable frequency drive.
- LCD Display
- Soft Touch keyboard
- 99 program memory
- Speed with 10 RPM increment
- Timer with 1 minute increment.
- Programmable Acceleration / deceleration (range 60-720 seconds)
- Selector switch for display of working speed/RCF value.
- Other indicators: remaining time, rotor in motion, imbalance, safety lid open.

Safety

- Safety Electrical and Mechanical lock with programmed emergency release mechanism.
- Imbalance detection & safety switch off.
- Safety Lid switch.

Technical Data

(TC 4100 D / TC 4100 F / MP 400)

(W) 450 mm x (D) 590 mm x (H) 445 mm

Weight: 52 kg, connected load: 0.75 kVA

Max. Speed: 20000 RPM, Max. RCF: 34500 xg,

Max. Tube Size: 100 ml, Max. Capacity: 400 ml



CASSIA



Fixed Angle Rotor Head

| Model | Cap./ml | Type of Rotor | Max. RPM | Max. RCF xg |
|---------|----------|---------------|----------|-------------|
| TC 4101 | 4x100 | Angle | 14000 | 21800 |
| TC 4102 | 8x50 | Angle | 13500 | 21800 |
| TC 4103 | 6x50 | Angle | 14500 | 23000 |
| TC 4104 | 4x50 | Angle | 17000 | 28500 |
| TC 4105 | 8x25 | Angle | 15000 | 23000 |
| TC 4106 | 6x25 | Angle | 17000 | 28500 |
| TC 4107 | 12x15 | Angle | 15000 | 23000 |
| TC 4108 | 8x15 | Angle | 16500 | 32000 |
| TC 4109 | 6x15 | Angle | 20000 | 34500 |
| TC 4110 | 4x10 | Swing Out | 12500 | 16000 |
| TC 4111 | 24x1.5/2 | Angle | 20000 | 31500 |
| TC 4113 | 24x0.5 | Angle | 20000 | 31500 |
| TC 4114 | 4x25 | Swing Out | 12000 | 16000 |
| TC 4115 | 18x15 | Angle | 14000 | 21800 |
| TC 4116 | 192x0.5 | Angle | 14000 | 21800 |
| TC 4117 | 48x1.5/2 | Angle | 15000 | 23000 |

REFRIGERATED MICROSPIN CENTRIFUGE

RC 4815 S

Features

- Programmable speed control with digital speed indicator.
- Digital display of working RCF value.
- Alarm at auto switch off.
- Programmable Acceleration time settings in the range 30 to 300 seconds.
- 1-99 minutes preset digital timer.
- CFC free cooling with pre-cooling & standby cooling facility.
- Digital temperature indicator - temperature range -10°C to +40°C

Safety

- Safety Lid switch
- Imbalance safety cut off.
- Chamber made of stainless steel.

RC 4815 F

Features

- Brushless low noise AC induction motor and inverter drive.
- Programmable Acceleration / deceleration - range 40-240 seconds.
- Dynamic brake
- Digital speed indicator
- CFC free cooling with pre-cooling & standby cooling facility.
- Digital temperature indicator - temperature range -10°C to +40°C.
- 1-99 minutes digital timer & infinite mode.
- Memory of last used program

Safety

- Imbalance detection & safety switch off.
- Safety Lid switch.
- Chamber made of stainless steel.

MP 300 R

Features

- Micro Processor Control
- Brushless low noise AC induction motor & variable frequency drive.
- LCD Display
- Soft Touch keyboard
- 99 program memory
- Speed with 10 RPM increment
- Timer with 1 minute increment.
- Programmable Acceleration / Deceleration (range 60-720 seconds).
- Selector switch for display of working speed/RCF value.
- Other indicators: remaining time, rotor in motion, temperature, imbalance, safety lid open.
- CFC free cooling with pre-cooling & standby cooling facility.
- Digital temperature indicator - temperature range of -10°C to +40°C.
- Temperature with 1°C increment.

Safety

- Safety Electrical and Mechanical lock with programmed emergency release mechanism.
- Safety Lid switch
- Imbalance safety cut off
- Chamber made of Stainless Steel.

Technical Data

(RC 4815 S / RC 4815 F / MP 300 R)

(W) 750 mm x (D) 490 mm x (H) 475 mm

Weight 75 Kg, Connected Load : 0.9 kVA,

Max. Speed: 16000 RPM, Max. RCF : 17600 xg,

Max. tube Size : 5 ml, Max. Capacity : 32 ml

Choice of Rotor Heads

| Model | Cap./ml | Type | Type of Tube | RPM | RCF |
|---------|------------------------------|-------|--------------|-------|-------|
| TC 481R | 24x1.5 | Angle | Eppendorff | 12000 | 15250 |
| TC 482R | 24xPCR | Angle | Eppendorff | 12000 | 12800 |
| TC 483R | 30x04 | Angle | Eppendorff | 12000 | 12800 |
| TC 484R | 16x1 | Angle | Eppendorff | 12000 | 12800 |
| TC 485R | 8x3 | Angle | Eppendorff | 12000 | 12800 |
| TC 486R | 6x5 | Angle | P.P. (T.B) | 12000 | 12800 |
| TC 487R | 8x4 | Angle | P.P. (T.B) | 12000 | 12800 |
| TC 488R | 8x3 | Angle | P.P. (R.B) | 12000 | 12800 |
| TC 489R | 8x2 | Angle | P.P. (R.B) | 16000 | 17500 |
| TC 490R | 8x2 | Angle | Glass (R.B) | 16000 | 17500 |
| TC 491R | 10x1 | Angle | Glass (R.B) | 16000 | 17500 |
| TC 492R | 12x0.5 | Angle | Glass (R.B) | 16000 | 17500 |
| TC 495 | Micro Haematocrite Capillary | | | 12000 | 15500 |
| TC 495R | Reading Device | | - | N.A. | N.A. |
| TC 496 | Micro Haematocrite Capillary | | | | |
| | 12x QBC-II Plus | | Carrier | 12000 | 15500 |



REFRIGERATED CENTRIFUGE

RC 8100 SF

Features

- Brushless low noise AC induction motor and inverter drive.
- Programmable Acceleration / Deceleration - range 40 - 240 seconds
- Dynamic brake
- Digital speed indicator
- CFC free cooling with pre-cooling & standby cooling facility
- Digital temperature indicator - temperature range -10°C to +40°C.
- 1-99 minutes digital timer & infinite mode
- Memory of last used program.

Safety

- Imbalance detection 7 safety switch off.
- Safety Lid switch
- Chamber made of stainless steel.

RC 8100 F

Features

- Brushless low noise AC induction motor and inverter drive.
- Programmable Acceleration / deceleration - range 40-240 seconds
- Dynamic brake
- Digital Speed indicator
- CFC free cooling with pre-cooling & standby cooling facility
- Digital temperature indicator - temperature range -10°C to +40°C.
- 1-99 minutes Digital timer & infinite mode.
- Memory of last used program.

Safety

- Imbalance detection & safety switch off.
- Safety Lid switch
- Chamber made of Stainless Steel

MP 800 R

Features

- Micro Processor Control
- Brush less low noise AC induction motor & variable frequency drive.
- LCD display
- Soft Touch keyboard
- 99 program memory
- Speed with 10 RPM increment
- Timer with 1 minute increment
- Programmable Acceleration / Deceleration (range 60-720 seconds)
- Selector switch for display of working speed/RCF value
- Other indicators: remaining time, rotor in motion, temperature, imbalance, safety lid open.
- CFC free cooling with pre-cooling 7 standby cooling facility.
- Digital temperature indicator - temperature range of -10°C to +40°C
- Temperature with 1°C increment.

Safety

- Safety Electrical and mechanical lock with programmed emergency release mechanism
- Safety lid switch
- Imbalance safety cut off
- Chamber made of Stainless Steel.

Technical Data

(RC 8100 SF / RC 8100 F / MP 800 R)

RC 8100 SF, Max RPM 18000, Max RCF : 28600 xg,

RC 8100 F / MP 800 R, Max RPM 10000, Max RCF : 7900 xg,

(w) 900 mm x (D) 640 mm x (H) 585 mm

Weight : 132 kg, Connect Load: 1.75 kVA,

Max. Tube Size: 200 ml, Max. Capacity: 1200 ml.

TC 8101 Swing Out Rotor Head without buckets

Buckets (carriers) suitable for use with TC 8101 Swing Out Rotor Head

| Model | Cap. / ml | Max. RPM | Max. RCF xg |
|------------|----------------------------------|----------|-------------|
| TC 8101 A | 4x200 | 5200 | 5050 |
| TC 8101 B | 4x100 | 6100 | 6600 |
| TC 8101 C | 4x18 RIA (5ml) | 5200 | 4200 |
| TC 8101 V | 4x9 Vacutainer (2,3,4 & 5 ml) | 5200 | 4200 |
| TC 8101 VL | 4x9 Vacutainer (6ml) | 5200 | 4200 |
| TC 8101D+E | 4x27 RIA (5ml) | 5200 | 4200 |
| TC 8107 | 2x1 MTP (Micro Titer Plate) | 3400 | 1700 |
| TC 8108 | 2x2 MTP (Micro Titer Plates) | 3400 | 1700 |
| TC 8109 | 4x250 | 5200 | 5050 |

* All rotor heads of TC 4100 series can be accommodated with Model RC 8100 SF

Fixed Angle Rotor Head

| Model | Cap./ml | RC 8100 F | | RC 8100 SF | | MP 800 R | |
|-----------|----------|-----------|-------|------------|-------------------|----------|-------------------|
| | | RPM | RCF | RPM | RCF _{xg} | RPM | RCF _{xg} |
| TC 8102 | 12x25 | 7000 | 7100 | 7000 | 7100 | 7000 | 7100 |
| TC 8103 | 6x200 | 7000 | 7250 | 7000 | 7250 | 7000 | 7250 |
| TC 8104 | 8x100 | 7000 | 7100 | 7000 | 7100 | 7000 | 7100 |
| TC 8105 | 12x50 | 7000 | 7100 | 7000 | 7100 | 7000 | 7100 |
| TC 8106 | 36x15 | 7000 | 7100 | 7000 | 7100 | 7000 | 7100 |
| TC 4115 | 18x15 | 10000 | 10500 | 10000 | 10500 | 10000 | 10500 |
| TC 4117 | 48x1.5/2 | 10000 | 10500 | 10000 | 10500 | 10000 | 10500 |
| TC 4111 | 24x1.5/2 | 10000 | 10500 | 10000 | 10500 | 10000 | 10500 |
| TC 8101 J | 4(4x15) | 4500 | 2780 | 4500 | 2780 | 4500 | 2780 |
| TC 8101 G | 4(3x15) | 4500 | 2780 | 4500 | 2780 | 4500 | 2780 |
| TC 8101 I | 4x(15x6) | 5200 | 5050 | 5200 | 5050 | 5200 | 5050 |
| TC 8110 | 4x250 | 7000 | 7250 | 7000 | 7250 | 7000 | 7250 |

Reduction Adaptors for use with Swing out Rotor Carriers

| | | | |
|---------|---------------------------|---------|---------------------------|
| TC 8111 | 100 ml in 200 ml carrier | TC 8118 | 5x15 ml in 100 ml carrier |
| TC 8112 | 50 ml in 200 ml carrier | TC 8116 | 25 ml in 100 ml carrier |
| TC 8114 | 7x15 ml in 200 ml carrier | TC 8121 | 1x50 ml in 250 ml carrier |
| TC 8113 | 3x30 ml in 200 ml carrier | TC 8122 | 3x25 ml in 250 ml carrier |
| TC 8117 | 13x5 ml in 200 ml carrier | TC 8123 | 5x15 ml in 250 ml carrier |
| TC 8115 | 50 ml in 100 ml carrier | TC 8124 | 13x5 ml in 250 ml carrier |

REFRIGERATED HIGH SPEED RESEARCH CENTRIFUGE

RC 4100 D

Features

- Step less speed regulator
- Digital speed indicator.
- 1-99 minutes Digital timer & infinite mode

Zero start interlock

Dynamic Brake

Alarm at auto switch off

CFC free cooling with pre-cooling & standby cooling facility

Digital temperature indicator - temperature range of -20°C to +40°C

Safety

- Imbalance safety cut off
- Safety Lid switch
- Chamber made of stainless steel

RC 4100 F

Features

- Brushless low noise AC Induction Motor and Inverter Drive
- Programmable Acceleration / Deceleration - range 40-240 seconds.
- Dynamic brake
- Digital speed indicator
- CFC free cooling with pre-cooling & standby cooling facility.
- Digital temperature indicator - temperature range -10°C to +40°C.
- 1-99 minutes digital timer & infinite mode.
- Memory of last used program

Safety

- Imbalance detection & safety switch off.
- Safety Lid switch.
- Chamber made of stainless steel.

MP 400 R

Features

- Micro Processor Control
- Brushless low noise AC induction motor & variable frequency drive.
- LCD Display
- Soft Touch keyboard
- 99 program memory
- Speed with 10 RPM increment
- Timer with 1 minute increment.
- Programmable Acceleration / Deceleration (range 60-720 seconds).
- Selector switch for display of working speed/RCF value.
- Other indicators: remaining time, rotor in motion, temperature, imbalance, safety lid open.
- CFC free cooling with pre-cooling & standby cooling facility.
- Digital temperature indicator - temperature range of -10°C to +40°C.
- Temperature with 1°C increment.

Safety

- Safety Electrical and Mechanical lock with programmed emergency release mechanism.
- Safety Lid switch
- Imbalance safety cut off
- Chamber made of Stainless Steel.



Technical Data
(RC 4100 D / RC 4100 F / MP 400 R)

(W) 860 mm x (D) 580 mm x (H) 520 mm
Weight: 114 kg, Connected Load: 1.75kVA
Max. Speed: 20000 RPM, Max. RCF: 34500 xg,
Max. Tube Size: 100ml, Max. Capacity: 400 ml.

Fixed Angle Rotor Head

| Model | Cap./ml | Type of Rotor | Max. RPM | Max. RCF xg |
|---------|----------|---------------|----------|-------------|
| TC 4101 | 4x100 | Angle | 14000 | 21800 |
| TC 4102 | 8x50 | Angle | 13500 | 21800 |
| TC 4103 | 6x50 | Angle | 14500 | 23000 |
| TC 4104 | 4x50 | Angle | 17000 | 28500 |
| TC 4105 | 8x25 | Angle | 15000 | 23000 |
| TC 4106 | 6x25 | Angle | 17000 | 28500 |
| TC 4107 | 12x15 | Angle | 15000 | 23000 |
| TC 4108 | 8x15 | Angle | 16500 | 32000 |
| TC 4109 | 6x15 | Angle | 20000 | 34500 |
| TC 4110 | 4x10 | Swing Out | 12500 | 16000 |
| TC 4111 | 24x1.5/2 | Angle | 20000 | 31500 |
| TC 4113 | 24x0.5 | Angle | 20000 | 31500 |
| TC 4114 | 4x25 | Swing Out | 12000 | 16000 |
| TC 4115 | 18x15 | angle | 14000 | 21800 |
| TC 4116 | 192x0.5 | angle | 14000 | 21800 |
| TC 4117 | 48x1.5/2 | Angle | 15000 | 23000 |

OIL TESTING CENTRIFUGE

SC 2000

- Step less speed regulator
- Digital speed indicator.
- 1-99 minutes Digital timer & infinite mode
- Zero start interlock
- Dynamic Brake

SC 6100 M

- Micro Processor Control with Brush less low noise AC induction motor & variable frequency drive.
- Soft Touch keyboard
- 99 program memory
- Speed with 10 RPM increment
- Timer with 1 minute increment
- Programmable Acceleration / Deceleration (range 60-720 seconds)
- Selector switch for display of working speed/RCF value.
- Other indicators: remaining time, rotor in motion, imbalance, safety lid open.
- Safety Electrical and Mechanical lock with programmed emergency release mechanism.

Technical Data
(SC 2000 & SC 6100 M)

SC 2000: (W) 505 mm x (D) 580 mm x (H) 525 mm, Weight 70 kg
Max. Speed : 3000 RPM, Max. RCF 1480 xg
Max. Tube Size : 100 ml, Max. Capacity : 400 ml.
SC 6100 M: (W) 650 mm x (D) 700 mm x (H) 745 mm, Weight 90 kg
Max. Sped : 3000 RPM, Max. RCF : 1760 xg
Max. Tube Size: 100 ml, Max. Capacity : 600 ml

Swing Out Rotor Heads with carriers suitable for use with Centrifuge Models SC 6100 M

| Model | Capacity | Type of Tests | RPM | RCF |
|-------------------|---|--|------|------|
| SC 6101 + SC 6102 | 6 Place S/O for 100 ml Pear shaped tubes | ASTM-D-96 | 3000 | 1760 |
| SC 6101 + SC 6104 | 6 Place S/O for 100 ml Taper bottom tubes, sulfonation flask & bob cock bottles | ASTM-D-91, ASTM-D-96, ASTM-D-1796, ASTM-D-893, IP-75-57, ASTM-D-484, ASTM-D-483, ASTM-D-1019, IP-145 | 3000 | 1760 |

Swing Out Rotor Heads with carriers suitable for use with Centrifuge Models SC 2000

| Model | Capacity | Type of Tests | RPM | RCF |
|-------------------|---|--|------|------|
| SC 2001 + SC 2002 | 4 Place S/O for 100 ml Pear shaped tubes | ASTM-D-96 | 3000 | 1480 |
| SC 2001 + SC 2004 | 4 Place S/O for 100 ml Taper bottom tubes, Sulfonation flask & bob cock bottles | ASTM-D-91, ASTM-D-96, ASTM-D-1796, ASTM-D-893, IP-75-57, ASTM-D-483, ASTM-D-484, ASTM-D-1019, IP-145 | 3000 | 1480 |

Standard Tests

| Type of Tests | Specification | Recommended | |
|---|---------------|-------------|-----------|
| | | Max. RPM | Max. Time |
| Water & sediments in crude oil | ASTM-D-96 | 800 | 10 Mts. |
| Water & sediments in petroleum products | IP-75 | 800 | 10 Mts. |
| Water & sediments in fuel oils | ASTM-D-1796 | 800 | 10 Mts. |
| Precipitation number of lubricating oils | ASTM-D-91 | 700 | 10 Mts. |
| Stoddard solvent | ASTM-D-483 | 100 | - |
| Olefinic plus aromatic hydrocarbons In petroleum distillates | ASTM-D-1019 | 400 | 15 Mts. |
| Olefinic plus aromatic contents | ASTM-D-893 | 700 | 20 Mts. |
| Unulfonated residue of petroleum plant | ASTM-D-483 | 100 | 10 Mts. |
| Reside in liquefied Petroleum (L.P.) | - | 800 | 10 Mts. |
| Trace sediments in lubricating oil | - | 700 | 10 Mts. |

MEDICO CENTRIFUGE

Technical Data

| Model | Unit | TC 415 ES | TC 415 ES | TC 615 S | TC 815 S |
|----------------|------|-----------|-----------|----------|----------|
| Max. Speed | RPM | 3700 | 3700 | 3500 | 3500 |
| Max. RCF | xg | 1950 | 1950 | 1900 | 1900 |
| Max. Tube Size | ml | 15 | 15 | 15 | 15 |
| Max. Capacity | ml | 60 | 60 | 90 | 120 |
| Width | mm | 295 | 310 | 310 | 310 |
| Depth | mm | 295 | 310 | 310 | 310 |
| Height | mm | 250 | 290 | 290 | 290 |
| Weight | kg | 6.00 | 6.50 | 6.50 | 605 |
| Connected Load | kVA | 0.11 | 0.13 | 0.13 | 0.13 |



CLINICAL CENTRIFUGE

Technical Data

| Model | Unit | TC 415 A | TC 615 A | TC 815 A | TC 245 A | TC 2415 A |
|----------------|------|----------|----------|----------|----------|-----------|
| Max. Speed | RPM | 4500 | 4500 | 4500 | 4000 | 4000 |
| Max. RCF | xg | 2050 | 2050 | 2050 | 1650 | 1650 |
| Max. Tube Size | ml | 15 | 15 | 15 | 15 | 1.5/2 |
| Max. Capacity | ml | 60 | 90 | 120 | 120 | 48 |
| Width | mm | 210 | 210 | 210 | 20 | 210 |
| Depth | mm | 235 | 235 | 235 | 235 | 235 |
| Height | mm | 230 | 230 | 230 | 255 | 255 |
| Weight | kg | 6 | 6 | 6 | 6 | 6 |
| Connected Load | kVA | 0.11 | 0.11 | 0.13 | 0.13 | 0.13 |



PATHOLOGICAL CENTRIFUGE

Technical Data

| Model | Unit | TC 725 A |
|----------------|------|----------|
| Max. Speed | RPM | 4000 |
| Max. RCF | xg | 2150 |
| Max. Tube Size | ml | 5 |
| Max. Capacity | ml | 360 |
| Width | mm | 300 |
| Depth | mm | 300 |
| Height | mm | 250 |
| Weight | kg | 10 |
| Connected Load | kVA | 0.22 |



MAGNETIC STIRRER (WITHOUT HEATING)

Technical Data

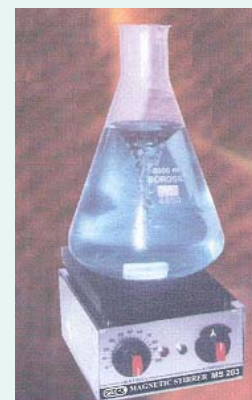
| Type | MS 202 | MS 204 | MS 210 | MS 220 | MS 250 |
|-------------------------|-------------|-------------|-------------|-------------|-------------|
| Max. Speed RPM | 1800 | 1800 | 1200 | 1200 | 1200 |
| Stirring Capacity Ltrs. | 2 | 5 | 10 | 20 | 50/75 |
| Dimension (WxDxH) | 160x165x120 | 190x190x170 | 250x250x170 | 340x340x195 | 450x450x250 |
| Stirring Paddle x L mm | 8x38 | 9.5x50 | 9.5x50 | 13x75 | 13x100 |
| Weight | 1.5 kg | 3.8 kg. | 10 kg. | 11 kg. | 25 kg. |



MAGNETIC STIRRER (WITH HOT PLATE)

Technical Data

| Type | MS 2012 | MS 203 | MS 205 | MS 211 | MS 221 |
|-------------------------|-------------|-------------|-------------|-------------|-------------|
| Max. Speed RPM | 1800 | 1800 | 1800 | 1200 | 1200 |
| Stirring Capacity Ltrs. | 1 | 2 | 5 | 10 | 20 |
| Dimension (WxDxH) mm | 140x150x120 | 160x165x130 | 190x190x170 | 250x250x195 | 340x340x215 |
| Stirring Paddle x L mm | 8x25 | 8x38 | 9.5x50 | 9.5x50 | 13x75 |
| Weight | 2.5 kg | 2.9 kg. | 4.8 kg. | 11 kg. | 12 kg. |



VORTEX MIXER

Technical Data (VM 301)

(W) 150 mm x (D) 150 mm x (H) 125 mm
Weight : 3.1 kg, Connected Load : 30 watts

FLUXSTIR MOTORLESS MAGNETIC STIRRER

Salient Features

- Power on/off switch with fuse protection.
- Reset button
- Smooth variable speed control
- Viscosity selector (high-low)
- Direction selector (cw-ccw)
- Compact sleek stainless steel housing

Technical Data

| Model | FS3 | FSH3 | FSH 3 R (with Remote Control) |
|--------------------------------------|--|--|--|
| Number of Stations | 1 | 1 | 1 |
| Stirring Volume | 50-3000 ml | 50-3000 ml | 50-3000ml |
| Mains Input | 240 V.AC (-15 to+10%) 50 Hz. (-15 to +5%) | 50 Hz. (-15 to+5%) 240 V.AC (-15 to+10%) | 240 V.AC (-15 to +10%) 50 Hz. (-15 to +5%) |
| Fuse | 1 No. 100 ma 5A | 2 Nos. 100 Ma 5A | 2 Nos. 100 Ma 5A |
| Power Consumption - Drive | 6 watts | 6 watts | 6 watts |
| Power Consumption - Heater | - | 500 watts | 500 watts |
| Speed Range (Standard) | 100-900 R.P.M. | 100-900 R.P.M. | 100-900 R.P.M. |
| Speed Range (Optional) | 15-150 R.P.M. | 15-150 R.P.M. | 15-150 R.P.M. |
| Speed Variation | Constant speed even if viscosity changes or supply | Constant speed even if viscosity changes or supply | Constant speed even if viscosity changes or supply |
| voltage vary within specified limits | voltage vary within specified limits | voltage vary within specified limits. | |
| Magnetic Stirring Paddle | 9mm dia X 35mm long | 9mm dia X 35mm long | 9mm dia X 35 mm long |
| Hot Plat Temperature | (Not Applicable) | 250 degrees centigrade | 350 degrees centigrade |
| Temperature Control | (Not Applicable) | Electronic Control | Electronic Control |
| Stirring Plate | 130mm dia | 164 mm dia | 164 mm dia |
| Electrical Protection | Current limit & short circuit | Current limit & short circuit | Current limit & short circuit |
| Housing - Base Plate | Aluminium | Aluminium | Aluminium |
| Housing - Top Plate | Stainless Steel | Stainless Steel | Stainless Steel |
| Hot Plate | (Not Applicable) | Alluminium | Aluminium |
| Housing Surface | Chemical Resistant | Chemical Resistant | Chemical Resistant |
| Finishing | Epoxy Powder | Epoxy Powder | Epoxy Powder |

Dimensional Specifications - Heater Box Only

| | | | |
|--------|--------|--------|--------|
| Width | 152 mm | 184 mm | 184 mm |
| Depth | 253 mm | 305 mm | 184 mm |
| Height | 58 mm | 80 mm | 78 mm |
| Weight | 2.1 kg | 3.2 kg | 2.3 kg |



ROTAMANTLE

Technical Data

| Type | RM 500 | RM 501 | RM 502 | RM 503 | RM 505 | RM 510 | RM 520 |
|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Max. speed RPM | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
| Stirring Capacity Ltrs. | 500 ml | 1 | 2 | 3 | 5 | 10 | 20 |
| Heating Capacity Watts | 200 | 300 | 40000 | 2x300 | 2x500 | 3x500 | |
| Dimension (WxDxH) mm | 160x160 170 | 190x190 190 | 230x230 230 | 250x250 250 | 290x290 290 | 400x400 340 | 450x450 380 |
| Stirring Paddle x L mm | 8x25 | 8x25 | 8x35 | 8x35 | 9.5x50 | 13x75 | 13x75 |
| Weight | 3.1 kg | 3.9 kg | 7 kg | 9 kg | 14 kg | 31 kg | 44 kg |

| Type | MS 251 | MS 252 | MS 254 | MS 255 |
|--|--------|--------|----------|---------|
| Magnetic stirring Paddle Teflon coated x L mm | 8 x 25 | 8 x 38 | 9.5 x 50 | 13 x 75 |



ORBITAL SHAKER

Benefits

- Safe and easy tray fixation
- 25 mm and 50 mm orbit
- Speed 25 to 400 RPM
- Timer up to 98.59 hrs.
- Analog out for documentation
- Memory function.
- Upto 5 litres
- Orbital shaker is designed to operate on environmental rooms or laboratory benches for variety of operation.
- It can be used for a variety of applications.
- Platform motion is monitored independently of motor operation for added protection.
- AC Motor with programmable drive to control the speed from 25 to 400 RPM
- Heavy gauge steel housing with epoxy coating AC Motor with digital display.
- Provides continuous operation even in temperatures from 4°C to 40°C.

Technical Data

| | | | | | |
|----------------------|----|----|-----|-----|-----|
| Flask Capacity (ml) | 25 | 50 | 125 | 250 | 500 |
| Flask Quantity (nos) | 49 | 49 | 36 | 25 | 16 |