

Thermo Scientific Cryofuge 5500i

Flexible refrigerated
centrifuges for blood banking
and clinical applications



Thermo Scientific Cryofuge 5500i – Refrigerated Blood Processing Centrifuges

The Thermo Scientific Cryofuge 5500i offers optimal capacity for small to medium size blood processing centers. The Cryofuge® 5500i can spin up to 8 blood bags, in a wide range of bag configurations – including 500 mL quints with in-line filters. In addition, achieve greater throughput from higher g-forces and capacities for all popular blood collection types and clinical tubes.

- Optimal 4 or 8 blood bag capacity for component processing
- Thermo Scientific Diagnostik™ rotor spins clinical analyzer racks pre-loaded with tubes, minimizing sample handling steps
- Superior 32 standard microplate capacity
- Thermo Scientific HIGHPlate® rotor spins microplates, or filter plates up to 85 mm in height, at 5,890 x g
- Easy-to-clean soft-touch keypad
- Reduced maintenance with brushless induction drive

In keeping with the latest trends in clinical testing, the Cryofuge 5500i maximizes microplate processing with the added benefit of biocontainment.

A wide range of rotors – including windshielded swinging bucket, clinical analyzer rack and windshielded microplate varieties – offer maximum flexibility for blood component processing and clinical testing needs.



Its powerful induction drive and its swinging bucket rotor – which accommodates Thermo Scientific DoubleSpin buckets – combine to provide higher g-forces and capacities for every type of sample tube. The result: shorter processing times for more samples.

Safe operation for you and your sample
The Cryofuge 5500i meets stringent international safety standards. It offers the widest

selection of independently tested biocontainment rotors that comply with rigorous international guidelines for aerosol containment of bacteria and viruses.

SMARTspin Imbalance Detection System provides optimum run stability for all rotors at all speeds, and allows sample tubes to be balanced by eye alone. The system will automatically decelerate the centrifuge if an excessive imbalance is detected.

Automatic Rotor Recognition offers convenient operation as well as reliable protection against incorrect parameter settings, and ensures reproducible run conditions.

Easy instrument set-up and operation includes:

- 9 program memory for standard runs
- 9 acceleration and deceleration profiles
- rpm to RCF conversion
- 'Pretemp' function for fast pre-cooling
- Quick Run Mode

Component processing made easy The Cryofuge 5500i offers convenient operation at your fingertips. Unlike other models, the Thermo Scientific EASYcontrol II Soft-Touch Keypad is located at the front of the instrument, eliminating awkward reaching. It incorporates large LED display panels that can be cleaned easily and read even at a distance.



Utilize your existing adapter inventory

The Cryofuge 5500i accepts the most popular liners.

- All accessories available for the double blood bag bucket (order no. 75007617)
- Thermo Scientific Centri-Lab Type C round adapters
- Centri-Lab® Type A rectangular adapters with the help of transition adapters that hold two Type A units per DoubleSpin™ bucket



LH-4000W rotor with double blood bag buckets

Safety, Reliability and Ease of Use in Blood Processing



Effortless access

The Soft-Touch Lid Lock ensures safe operation with an easy-open/close mechanism. The lid can be opened and closed effortlessly with just one hand.

Easy Set-Up, Programming and Monitoring

An intuitive operator keypad allows you to recall protocols at the touch of a button.

Whisper-Quiet Operation

A noise level under 58 dBA provides a more comfortable lab working environment.

Energy-Efficient Performance

Energy-saving design increases refrigeration efficiency and minimizes heat output, ensuring a more comfortable working environment.

Software for Sample Tracking

Thermo Scientific Heranet software allows users to document centrifugation in blood banks. The software saves actual and set values and processes information which is entered at the centrifuge, using a barcode reader.

Highest Versatility

Swinging-bucket rotors for the Cryofuge series centrifuges support a diverse array of sample processing applications without the need to modify existing protocols.

Our Cryofuge 5500i centrifuge works with the Thermogenesis APX system from Thermogenesis company to automatically separate cord blood into a freezing bag, for the mononuclear cell product, an erythrocyte bag and an excess plasma bag.



SPECIFICATIONS AND ORDERING INFORMATION

Thermo Scientific Cryofuge 5500i Rotors and Adapters

Rotor Specifications

| Description | Capacity (place x mL) | Max. Tube Dim. D x L (mm) | Max. Speed (rpm) | Max. RCF (xg) | Cat. No. |
|---|--------------------------|------------------------------|---------------------|------------------|----------|
| LH-4000W Windshield Swinging Bucket Rotor | 8 x 500 | Blood Bags | 4400 | 5480 | 75006476 |
| LH-4000 Swinging Bucket Rotor** | 4 x 1000 | One liter | 4400 | 5350 | 75006475 |
| Double Blood Bag Bucket (not applicable for 75006475) | 8 x 500 | Blood Bags | 4400 | 5480 | 75006436 |
| Round Bucket | 4 x 1000 | 100 x 190 | 4400 | 5350 | 75006477 |
| Biocontainment Lids (1 pair) | | | | | 75006421 |
| DoubleSpin Bucket | 4 x 250 | 62 x 145 | 4400 | 4650 | 75006478 |
| Biocontainment Lids (1 pair) | | | | | 75006479 |
| Microplate Adapter for DoubleSpin Bucket | 4 x 8 | Standard Microplates | 4400 | 4650 | 75006486 |

Adapters for LH-4000W and LH-4000 Rotors with Round Buckets

| | | | | | |
|--|----------------|----------|--|--|---------------------|
| 1.5 / 2 ml Disposable Microtubes | 192 x 1.5/2 ml | 11 x 50 | | | 75008132 |
| 7 ml Standard Tube | 140 x 7 ml | 13 x 177 | | | 75008133 |
| 5/7 ml Blood Collection Tube (Set of 4) | 108 x 5/7 ml | 13 x 177 | | | 11210822 |
| 10 ml Blood Collection Tube (Set of 4) | 84 x 10 ml | 16 x 177 | | | 11210821 |
| 10/15 ml Blood Collection Tube | 68 x 10/15 ml | 17 x 177 | | | 75008136 |
| 15 ml Standard Tube | 76 x 15 ml | 17 x 177 | | | 75008135 |
| 15 ml Disposable Conical Tube | 48 x 15 ml | 19 x 177 | | | 75008137 |
| 50 ml Round Bottomed Tube | 28 x 50 ml | 29 x 177 | | | 75006493 |
| 50 ml Disposable Conical Skirted Tube | 20 x 50 ml | 29 x 177 | | | 75006533 |
| 50 ml Disposable Conical Tube (Set of 4) | 28 x 50 ml | 29 x 177 | | | 11210826 |
| 225/175 ml Disposable Conical Bottle | 4 x 225 ml | 62 x 145 | | | 75008144 + 03095 |
| 250 ml Flat-Bottomed Bottle | 4 x 250 ml | 62 x 145 | | | 75008144 |
| 250 ml Disposable Conical Bottle | 4 x 250 ml | 62 x 177 | | | 75008147 |
| 500 ml Flat-Bottomed Bottle | 4 x 500 ml | 70 x 190 | | | 75008145 |
| 500 ml Disposable Conical Bottle | 4 x 500 ml | 96 x 190 | | | 75006438 |
| 1000 ml Flat Bottomed Bottle | 4 x 1000 ml | 98 x 190 | | | no adapter needed |

Adapters for LH-4000W and LH-4000 Rotors with DoubleSpin buckets

| | | | | | |
|---|-----------------|----------|--|--|---------------------|
| 1.5 / 2 ml Disposable Microtubes | 448 x 1.5/2 ml* | 11 x 50 | | | 75006452 |
| 7 ml Standard Tube | 224 x 7 ml* | 13 x 151 | | | 75006453 |
| 5/7 ml Blood Collection Tube | 160 x 5/7 ml* | 13 x 150 | | | 75006454 |
| 10/15 ml Blood Collection Tube | 128 x 10/15 ml* | 17 x 147 | | | 75006455 |
| 15 ml High Capacity Disposable Conical Tube | 96 x 15 ml | 19 x 150 | | | 75006468 |
| 15 ml Disposable Conical Tube | 72 x 15 ml* | 19 x 150 | | | 75006456 |
| 50 ml Round Bottomed Tube | 32 x 50 ml* | 29 x 140 | | | 75006491 |
| 50 ml Disposable Conical Tube | 32 x 50 ml* | 29 x 140 | | | 75006461 |
| 175/ 225 ml Disposable Conical Tube | 8 x 175/225 ml* | 62 x 145 | | | 75006465 + 03095 |
| 250 ml Flat-Bottomed Bottle | 8 x 250 ml* | 62 x 145 | | | 75006465 |

*In order to achieve maximum specified capacity must order 8 adapters (2/bucket)



**Only for use in 230V version



Thermo Scientific Cryofuge 5500i Rotors and Adapters




Rotor Specifications

| Description | Capacity (place x mL) | Max. Tube Dim. D x L (mm) | Max. Speed (rpm) | Max. RCF (xg) | Cat. No. |
|--|---------------------------------------|------------------------------|---------------------|------------------|---------------------|
| Equipment for Blood Bag Centrifugation in LH-4000W Rotor with Blood Bag Buckets | | | | | |
| Adapter for 500 ml quint, quad, triple with in-line filters and filter holder "XXL" (set of 6) | 8 x 500 ml | | | | 76007677 |
| Adapter for 450/500 ml quad, triple "XL" (set of 6) | 8 x 500 ml | | | | 76007657 |
| Adapter for 450 ml triple "L" (set of 6) | 8 x 450 ml | | | | 76007647 |
| Adapter for 450 ml double "M" (set of 6) | 8 x 450 ml | | | | 76007667 |
| Balancing weight system: taring range 300 – 1,550 g | | | | | 75007668 |
| Taring sticks: 4 of 6 g and 15 g | | | | | 75007645 |
| Taring plates: black rubber, 2 of 35 g and 2 of 65 g | | | | | 75005759 |
| Volume adjustment plates: blue rubber (set of 12) | | | | | 75006681 |
| Accessories for Blood Bag Centrifugation in LH-4000/LH-4000W with round buckets | | | | | |
| Adapter for 400 – 500 ml quad blood bags "L/M" (set of 2) | 4 x 500 ml | | | | 75006496 |
| Adapter for small volume (250 ml) special blood applications (set of 2) | 4 x 250 ml | | | | 75006485 |
| Taring plates: black rubber, 2 of 35 g and 2 of 65 g | | | | | 75005759 |
| Taring sticks: 4 of 6 g and 15 g | | | | | 75007645 |
| Volume adjustment plates: blue rubber (set of 12) | | | | | 75006681 |
|  BIOshield® Windshielded Rotor | 4 x 250 | 62 x 125 | 5850 | 6960 | 75006435 |
| Adapters for BIOshield Rotor | | | | | |
| 1.5/2 ml Disposable Microtubes | 224 x 1.5/2 ml | 11 x 50 | | | 75006452 |
| 7 ml Standard Tube | 112 x 7 ml | 13 x 117 | | | 75006453 |
| 5/7 ml Blood Collection Tube | 80 x 5/7 ml | 13 x 117 | | | 75006454 |
| 10/15 ml Blood Collection Tube | 64 x 10/15 ml | 17 x 117 | | | 75006455 |
| 15 ml Disposable Conical Tube | 36 x 15 ml | 19 x 119 | | | 75006456 |
| 50 ml Round Bottomed Tube | 16 x 50 ml | 29 x 119 | | | 75006491 |
| 50 ml Disposable Conical Tube | 16 x 50 ml | 29 x 119 | | | 75006461 |
| 175/225 ml Disposable Conical Tube | 4 x 175/225 ml | 62 x 125 | | | 75006465 + 03095 |
| 250 ml Flat-Bottomed Bottle | 4 x 250 ml | 62 x 125 | | | 75006465 |
|  HIGHPlate® Windshield Rotor | 2 x 5 Standard Microplates | | 5650 | 5890 | 75006435 |
| Standard Microplates | 10 x Standard Plates up to 20 mm tall | | | | |
| Deepwell Microplates | 2 x Deepwell Plates up to 83 mm tall | | | | |
| Diagnostik™ Rack Rotor | | | | | |
| Trays for Diagnostik Rotor | Tubes | | 3500 | 2550 | 75006480 |
| Hitachi® | 100 | 118 x 20 | | | 75006416 |
| Olympus® | 120 | 117 x 20 | | | 75006417 |
| Systemex® | 120 | 200 x 25 | | | 75006418 |
| Dade-Behring® | 40 | | | | 75006419 |



Rotor Specifications

| Description | Capacity (place x mL) | Max. Tube Dim. D x L (mm) | Max. Speed (rpm) | Max. RCF (xg) | Cat. No. |
|---|--------------------------|------------------------------|---------------------|------------------|---------------|
|  Highconic® Fixed-angle Rotor | 6 x 50 | 29 x 119 | 8500 | 10,020 | 75003057 |
| Adapters for Highconic rotor | | | | | |
| 1.5 ml Disposable Microtubes | 24 x 1.5 ml | 11 x 58 | | | 75002905 |
| 3.5 ml Round Bottomed Tube | 24 x 3.5 ml | 11 x 103 | | | 75003091 |
| 7 ml Round Bottomed Tube | 12 x 7 ml | 13 x 115 | | | 75003092 |
| 12 ml Round Bottomed Tube/5 ml Blood Collection Tube | 12 x 12/5 ml | 16 x 96 | | | 75003093 |
| 15 ml Disposable Conical Tube | 6 x 15 ml | 17 x 119 | | | 75003095 |
| 16 ml Round Bottomed Tube | 6 x 16 ml | 18 x 124 | | | 76002906 |
| 38 ml Round Bottomed Tube | 6 x 38 ml | 25 x 112 | | | 75003094 |
| 50 ml Round Bottomed Tube | 6 x 50 ml | 29 x 118 | | | 75003102 |
| 50 ml Disposable Conical Tube | 6 x 50 ml | 29 x 119 | | | 75003103 |
| LAC-250 Fixed-angle Rotor | 6 x 250 | 62 x 145 | 10,000 | 15,320 | 75006483 |
| Adapters for LAC-250 rotor | | | | | |
| 3 ml Glass Tube | 30 x 3 ml | 10 x 75 | | | 00370 + 00456 |
| 5 ml Glass Tube | 72 x 5 ml | 12 x 75 | | | 00388 |
| 10 ml Round Bottomed Tube | 42 x 10 ml | 16 x 100 | | | 00389 |
| 15 ml Round Bottomed Tube | 30 x 15 ml | 18 x 120 | | | 00456 |
| 30 ml Round Bottomed Tube | 18 x 30 ml | 24 x 105 | | | 00449 |
| 50 ml Disposable Conical Tube | 6 x 50 ml | 29 x 119 | | | 03072 |
| 175/225 ml Disposable Conical Bottle | 6 x 175/225 ml | 62 x 130 | | | 03095 |
| 250 ml Flat-Bottomed Bottle | 6 x 250 ml | 62 x 130 | | | N/A |





Thermo Scientific Cryofuge 5500i

| Specifications | | |
|------------------------|----------|---|
| Description | | Speed range rpm 300 – 10,000, adjustable in 10 rpm increments |
| Max. RCF | | 15,320 g |
| Max. capacity | | 8 x 500 ml blood bags or 4 x 1,000 ml or 4 x 8 standard microplates |
| Drive | | brushless induction drive |
| Accel./decel. profiles | | 9/9 |
| Program memory | | 9 + 1 pretemp program |
| Run time | | 0 – 99 min, plus hold |
| Temperature range | | -9 to +40 °C , CFC-free refrigerant |
| Control | | microprocessor controlled via EASYcontrol™ II |
| Functions | | RCF-preselection, Quick-run, automatic rotor recognition, imbalance detection and Soft-Touch lid-lock |
| Imbalance | | electronic, speed and rotor dependent |
| <hr/> | | |
| Dimensions (H x W x D) | mm | 960 x 680 x 720 |
| | inch | 37.8 x 26.8 x 28.3 |
| Weight | kg (lbs) | 286 (631) |
| <hr/> | | |
| Multifuge 4KR | | |
| Dimensions (H x W x D) | mm | 700 x 680 x 720 |
| | inch | 37.8 x 26.8 x 28.3 |
| Multifuge 4KR weight | kg (lbs) | 236 (519) |
| <hr/> | | |
| Test standards | | Designed and tested in accordance with EN 61 010-1, EN 61 010-2-020, EN 50 081-1, EN 50 082-1 |

| Ordering Information | | |
|-------------------------------|---|-----------|
| Model | Description | Order no. |
| Cryofuge 5500i | Refrigerated, 230 V, 50 Hz, 12.9 A | 75004471 |
| Cryofuge 5500i (CSA) | Refrigerated, 200 – 230 V, 60 Hz, 16 A / 200 V, 50 Hz, 16 A | 75004479 |
| Cryofuge 5500i (CSA) | Refrigerated, 120 V, 60 Hz, 20A | 75004475 |
| Multifuge 4KR ¹⁾ | Refrigerated, 230 V, 50 Hz, 12.9 A | 75004461 |
| <hr/> | | |
| GMP Version | | |
| Cryofuge 5500i (water cooled) | 230 V/50 Hz /single phase | 75004478 |

Cryofuge 5500i GMP with complete encapsulated housing and special smooth surface meets requirements for "clean rooms" according to EC-GMP Guide 1 Annex and FDA Aseptic Guide ¹⁾ Not available in the United States

If floor space is limited, consider our Multifuge 4KR. Offering the same specifications as our Cryofuge 5500i, but sized to fit under your lab workstation.

This product complies with F-Gas REGULATION (EU) No 517/2014. Contains fluorinated greenhouse gases in a hermetically sealed system. See Technical Data Sheet for full details.

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