

Expertise you can trust when separation matters

Optimal centrifuge speed and quality to fit every application

thermo scientific

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World class centrifuges built on our history of innovation

Labs around the world trust their separation tasks to our centrifuges. Our robust portfolio of fit-for-purpose solutions, decades of established expertise, global support team, and groundbreaking approach to innovation and design mean scientists like you can count on us to handle the equipment while you focus on your science.

Reasons labs choose the Thermo Scientific brand

- **1.** Trusted brand with a longstanding history of over 75 years in centrifugation, along with worldwide manufacturing and distribution sites.
- Developer of innovative, high-quality solutions focused on enhancing the user experience, including our state-of-the-art Thermo Scientific[™]
 Fiberlite[™] carbon fiber rotors, Auto-Door[™] opening, Auto-Lock[™] rotor exchange, and ClickSeal[™] biocontainment lids, which improve the safety, efficiency, and reproducibility of essential workflows.
- **3.** Broad and comprehensive portfolio of centrifuges and accessories to suit any application or budget, ranging from basic mini centrifuges to industrial floorstanding centrifuges.
- **4.** World-class technical customer service team providing vital support for installation, service contracts, and compliance services across the globe.
- 5. An expert partner focused on meeting the latest safety and sustainability standards—from the idea phase to final product—that helps enable our customers to make the world cleaner, healthier, and safer.





For all applications

ClickSeal biocontainment lids



Fiberlite carbon fiber rotors



Auto-Lock rotor exchange

Centrifuges that revolve around your needs



Whatever your application, we have you covered

Academic/Life Science Research

- Micro centrifuges
- Compact & clinical centrifuges
- General purpose centrifuges
- Ultraspeed centrifuges
- Superspeed centrifuges



Biopharma

- Micro centrifuges
- General purpose centrifuges
- Ultraspeed centrifuges
- Superspeed centrifuges
- Large capacity centrifuges –
 bioprocessing

Clinical

- Micro centrifuges
- Compact & clinical centrifuges
- General purpose centrifuges
- Large capacity centrifuges blood banking



Bioprocessing

- Large capacity centrifuges –
 bioprocessing
- Ultraspeed centrifuges
- Superspeed centrifuges
- Industrial centrifuges



Overview

Benchtop centrifuges

Small in size, big in power

Mini centrifuges

Thermo Scientific[™] mySPIN[™] 6 and 12 centrifuges

Efficient and easy to use with ergonomic design and tool-free rotors

- Ease of use—Ergonomic design, tool-free rotors, and quickspin options make it fast and effortless. The Thermo Scientific[™] mySPIN[™] 6 Portable Kit, a handy transport box, facilitates your sample separation performed outside the laboratories
- Efficient—Ideal for most protocols requiring fast spins (12,500 rpm / 9,800 x g)
- **Safe**—Features help ensure it will not operate when the lid is open or if a rotor is jammed and operates quietly with low vibration.



ACADEMIA BIOPHARMA CLINICAL

8

Micro centrifuges

Thermo Scientific[™] Pico[™]/Fresco[™], MicroCL and Sorvall[™] Legend centrifuge series

Ideal for every day use, combining power, versatility, and convenience in a safe, compact, easy-to-use lab instrument

- Ease of use-Simplify operation with intuitive controls, • easy-to-read displays and fast one-click centrifuge lid closure
- Efficient-Fast acceleration and deceleration, and outstanding ۰ corrosion resistance with lightweight engineered polymer rotors; includes a broad array of microcentrifuge rotors and accessories for processing micro-volumes
- Safe-Ergonomic one-click biocontainment lid opening and • closing, as well as transparent design for added safety with certified ClickSeal biocontainment lids

BIOPHARMA ACADEMIA CLINICAL



Compact centrifuges

Thermo Scientific[™] ST8, SL8, Megafuge[™] 8 and Medifuge[™] centrifuge series

Coupled with our extensive rotor selection, these small bench centrifuges offer flexible and efficient performance in a compact, easy-to-use lab instrument

- Ease of use—Secure, push-button Auto-Lock rotor exchange in as little as three seconds delivers trouble-free rotor installation
- Efficient—Maximized swing-out capacity up to 8 x 50mL conical tubes.
 Fixed angle flexibility to spin 50mL conical tubes at over 12,000 x g or a wide range of microtubes at speeds up to 30,279 x g
- **Safe**—Biocontainment sealing options, including certified[†] ClickSeal lids offer glove-friendly, one-handed operation

†Certified by Public Health England, Porton Down, UK

ACADEMIA BIOPHARMA CLINICAL



General purpose centrifuges

Thermo Scientific[™] X Pro and ST Plus series centrifuges

The most powerful and versatile centrifuge solution designed to fit all application needs

- Efficient—Auto-Lock rotor exchange provides flexibility to quickly switch between applications in less than 3 seconds without the need for any tools. Achieve faster results with the ability to hold up to 196 blood tubes, 40 x 50 mL conical tubes, or 24 microplates in one run
- Ease of use—Improved ergonomics with ClickSeal biocontainment options to improve sample and user safety. Bright, easy-to-use LCD control panel with touchscreen interface for simple programming and effortless operation on X Pro models
- **Safe**—Ergonomically designed for improved reach-in during rotor installation for safer loading and unloading. Hand grip cue on the lid and other embedded safety features to prevent injuries

ACADEMIA BIOPHARMA CLINICAL

SAFI SAFI POWERFU VERSATIL





Overview

Floor model centrifuges

Combining high performance with ease of operation for maximum flexibility and high throughput

Ultraspeed centrifuges

Thermo Scientific[™] Sorvall[™] WX+ and Sorvall[™] MTX/MX+ ultracentrifuge series

With performance over 1,000,000 x g and up to 150,000 rpm in a compact footprint, these units maximize your lab space for high-performance applications

- Versatile-Extensive rotor selection, including unique carbon fiber rotors, provide application flexibility as your research focus evolves
- **Simplified**—Keep operation and programming simple with • a user-friendly, full-color graphical display and visual sample balancing up to 5 mm
- Quiet—With noise level as low as 45 dBA in MTX and 51 dBA • in Sorvall WX+ series, while running at over 100,000 plus rpm allows you to still work right next to the unit with minimal distraction

BIOPHARMA ACADEMIA BIOPROCESSING



Superspeed centrifuges

Thermo Scientific[™] Sorvall[™] LYNX superspeed centrifuge series

Features powerful technologies with breakthrough simplicity, satisfying application needs up to 100,605 x g and 6 liters capacity

- Ergonomic features—Carbon fiber rotors provide lightweight alternatives when compared to metal rotor equivalents; speed handles for easier and safer lifting of rotors; foot space to allow closer positioning of the user to the centrifuge, reducing strain when loading and unloading
- Safety-Auto-Lock rotor exchange with Auto-ID instant • rotor identification eliminates the worry improper rotor attachment and overspeeding that can lead to rotor accidents
- Sustainability-Additional energy efficiency settings with Smart • Vacuum and Lighthouse mode selection

ACADEMIA BIOPHARMA BIOPROCESSING



Blood banking centrifuges

Thermo Scientific[™] Cryofuge[™] 8, Cryofuge 16, Sorvall[™] BP 8, and Sorvall BP 16 series

Proven productivity, built around you

- Improved capacity to maximize productivity Unique 16 x 500 mL blood bag capacity
- Enhanced ergonomics with push-button convenience
 Auto-Door automatic centrifuge door
 opening and closing
- Simplified operation and space-saving design Auto-Lid instant rotor opening and closing with lid storage
- Quick run set-up and standardization
 Glove-friendly Thermo Scientific[™] Centri-Touch[™] interface with
 Thermo Scientific[™] Centri-Cross[™] function to convert your
 existing protocols

CAPACITY B CAPACITY B ERGONOMICS B PRODUCTIVITY O

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CRYOFUGE 15

CLINICAL BLOOD BANKING

Learn more at thermofisher.com/floorcentrifuges



Bioprocessing centrifuges

Thermo Scientific[™] Sorvall[™] BIOS 16 and Sorvall BIOS A series

Centrifuges designed for reliable, high-throughput bioprocessing

- Outstanding capacity to maximize productivity
 Unique 8 x 2000 mL (16 L) capacity
 Unique 10 x 1000mL (10L) configuration up to 12,000 x g
 with Fiberlite[™] carbon fiber F6-10x1000 LEX rotor
- Enhanced ergonomics with push-button convenience Auto-Door automatic centrifuge door opening and closing
- Simplified operation and space-saving design
 Auto-Lid instant rotor opening and closing with lid storage.
 Glove-friendly Centri-Touch interface supports quick run set up.
- Superior bottles and containers! New and improved 1L and 2L bottles: food grade, non-sterile or sterilized; new single-use, sterilized Thermo Scientific[™] CentriPAK[™] BioProcess Containers

BIOPROCESSING BIOPHARMA

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Industrial centrifuges

Thermo Scientific[™] Sorvall[™] CC40NX and CC40SNX ultracentrifuge series

Scalable, continuous-flow ultracentrifuges for automated purification or concentration of viral and nanosize particles

- Versatility in separating your nanosize particles
- Flexibility in scaling your process
- Automation: process control and sample integrity
- Supports GMP compliance
- Reduced cost of ownership
- Minimized time to commercialization and maximized uptime



BIOPHARMA BIOPROCESSING

l earn more at Sorvall CC40

Fiberlite rotors

Thermo Scientific[™] Fiberlite[™] carbon fiber rotors

Backed with a 15-year warranty, our unique carbon fiber rotors maximize centrifuge performance with versatility, speed, and built-in safety features

- Lightweight and durable design—Up to 60% less weight than metallic rotors, with a unique integrated handle design to facilitate a safer work environment and improve ergonomic operation. Corrosion-resistance and fatigue-resistance maintain the rotor's structural integrity for outstanding durability and provide cleaning convenience using most mild laboratory detergents and solutions.
- Efficient and safe—Exclusive molding technology of these rotors helps to perfectly fit disposable conical tubes without risk of tube damage. Designed to "unwind" rather than split or break, so your centrifuge is better protected from damage in the unlikely event of a rotor failure.
- **Performance**—Fiberlite rotor and biocontainment lid combinations offer features that protect the user, the centrifuge, and the samples from hazardous contamination. Fiberlite rotors can reach higher speeds than metal equivalents, improving separations in tubes such as 15 or 50 mL conicals.

RAFE LIGHTWEIGHT EFFICIENT PERFORMANCE

Consumables & accessories

Thermo Scientific™ Fiberlite™ Bottle System

High-performance bottles designed to achieve maximum centrifuge performance with the versatility of 1000mL, 500mL and 250mL volumes in both polypropylene copolymer (PPCO) and polycarbonate (PC) options when paired with Fiberlite rotors.

High Performance Centrifuge Bottles

High-performance bottles designed for superspeed and large capacity performance with 1000mL volumes and caps with improved chemical resistance to phenol solutions in both polypropylene copolymer (PPCO) and polycarbonate (PC) options.

Thermo Scientific[™] SteriBIOS[™] 1000mL Bottles

Single use, sterilized bottles (ISO 11137-1 and ISO 11137-2 standards) designed for maximum performance used in BIOS 16 Processing centrifuge, Sorvall Lynx Series centrifuges with F10-4x1000 LEX and F9-6x1000 LEX rotors and (1000mL) for Sorvall BIOS A centrifuge with F6-10x1000 LEX rotor.

Thermo Scientific[™] BIOS and SteriBIOS 2000mL Bottles

Process a 16mL harvest in a single run with 2000mL bottles designed for use in BIOS 16 Processing centrifuge and 6 x 2000mL or 8 x 2000mL swinging bucket rotors. Available in both standard and single-use versions.

Thermo Scientific[™] CentriPAK[™] BPC System

Single-use, sterilized closed system for centrifugation that enables gentle, high-throughput and high-efficiency harvesting that meets rigorous quality control and assurance practices for the manufacture of material components.

Buckets and Adapters

thermo

Our wide selection of adapter shapes and sizes allows users to utilize our comprehensive selection of swinging bucket, round bucket and fixed angle rotors. ClickSeal lids provide biocontainment for many bucket shapes and fixed angle rotors.

Choose the right centrifuge

Thermo Scientific centrifuge solutions to fit all your lab needs

- 16,000 Sorvall[™] BP Series / BIOS 16 10,000 8,000 6.000 4,000 2,000 1,000 800 600 Max capacity (mL) 400 200 100 80 60 40 20 10 8 6 4 2 2500 10,00 20,000 25,000 30,00 1,500 40,000 50,00 15,000 500,000 150,000 1,000,000 500 000 60 Max RCF (x g) Particles of interest Large viruses Lipoproteins Whole RBCs Plasmids Nucleic Large Mitochondria Small viruses & proteins cells proteins preps acid preps Nanoparticles Exosomes
- Speed (g-force) and capacity are the two most basic differentiators in centrifugation

Sustainable to keep the world spinning

From the idea phase through manufacturing, shipping, and use, we go to great lengths to minimize the environmental footprint of our Thermo Scientific centrifuges

Planet-friendly features:

- Reduced energy consumption—Cutting-edge features like Green Mode, Smart Vacuum, Auto-Door, Eco-Spin windshielded rotors, and Fiberlite carbon fiber rotors provide energy savings of up to 74% compared to older centrifuge models. Great for the environment and your energy bills!
- Efficient cooling systems—To manage energy and environmental impact in high-use environments, certain centrifuge models are designed to shut off the automatic cooling function when the instrument is off or when the door opens, thus reducing power consumption and save energy on refrigeration.
- Less wastage—All excess scrap material created during manufacturing is reused, and the lightweight Fiberlite carbon fiber rotors are corrosionresistant with a lifespan up to 300% longer than comparable metal rotors. They are easily repairable and backed by a 15-year warranty which is significantly longer than aluminum or titanium rotors.
- **RoHS and WEEE compliant**—Thermo Scientific centrifuges are guaranteed to be free of all RoHS-listed hazardous substances (i.e., lead, cadmium, mercury, chromium6+, PBB, PBDE). WEEE compliance ensures that our centrifuges utilize environmentally sound manufacturing practices.

Paving the way for efficient instrument connectivity

With our connectivity capabilities, you can establish secure access to your lab through centralized device monitoring, user access control, and data management, while streamlining your compliance procedures to latest guidelines and standards.

Blood banking

Bioprocessing

Thermo Scientific[™] Centri-Log[™] Plus software

For large-capacity, superspeed, bioprocessing and general purpose centrifuges

- Data management software for centralized monitoring of unlimited number of centrifuges via ethernet
- Supports GMP and 21 CFR Part 11 compliant data tracking
- Provides complete traceability by generating barcodes for users, samples, programs and process results
- Can connect to LIMS via a third-party software data access point
- Real-time run data for all networked centrifuges

Biopharma and Biotech

Thermo Scientific[™] Centri-Vue[™] app

For large-capacity, superspeed and bioprocessing centrifuges

- Mobile app to check centrifuge status at a glance
- Monitors run data and check for diagnostic errors from your mobile device
- Enables remotely starting/stopping the run

SECURE-Spin mode

For Thermo Scientific[™] General Purpose X Pro centrifuges

- Advanced user management feature on the centrifuge user interface
- Can be connected to Centri-Log Plus software
- Supports 21 CFR Part 11 and GMP compliant user and data management standards
- Allows use of sample tracking kit and provides
 audit trails

Stay connected for more!



Our support and commitment continues even after your purchase

Your equipment shouldn't slow you down. That's why we offer robust, end-to-end service solutions to reduce your total cost of ownership and ensure your centrifuge keeps operating at peak performance.

Service Solutions:

- Expert installation and setup—Our team will come on-site to get your centrifuge up and running. This includes installation, configuration/ calibration, training for your team, and more.*
- Validation services—Can be performed when your equipment is delivered to save you time and reduce hassle. Includes a certified validation technician, factory-developed protocols, and a professional validation packet consisting of:
 - IQ, OQ, PQ and either temperature mapping, cycle testing, or sterilization testing
 - Unit-specific operations manual
 - Critical pass/fail analysis
 - Certificates of training and calibration

- Extended warranty—A fixed-cost, proactive maintenance package that kicks in after the original warranty expires. Includes priority on-site repair by qualified technicians, unlimited parts and labor, and priority phone/email support.
- **Preventative Maintenance**—This set of standard procedures ensures that the centrifuge performance is at or near the same levels as when it was installed, to help you get the most out of your investment.

Plan offerings may differ by country. Consult your regional specialist for details.

For more information on support plans and compliance services, visit <u>Services and Support</u>.

* Inside delivery and freight not included





Learn more at thermofisher.com/centrifuges

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