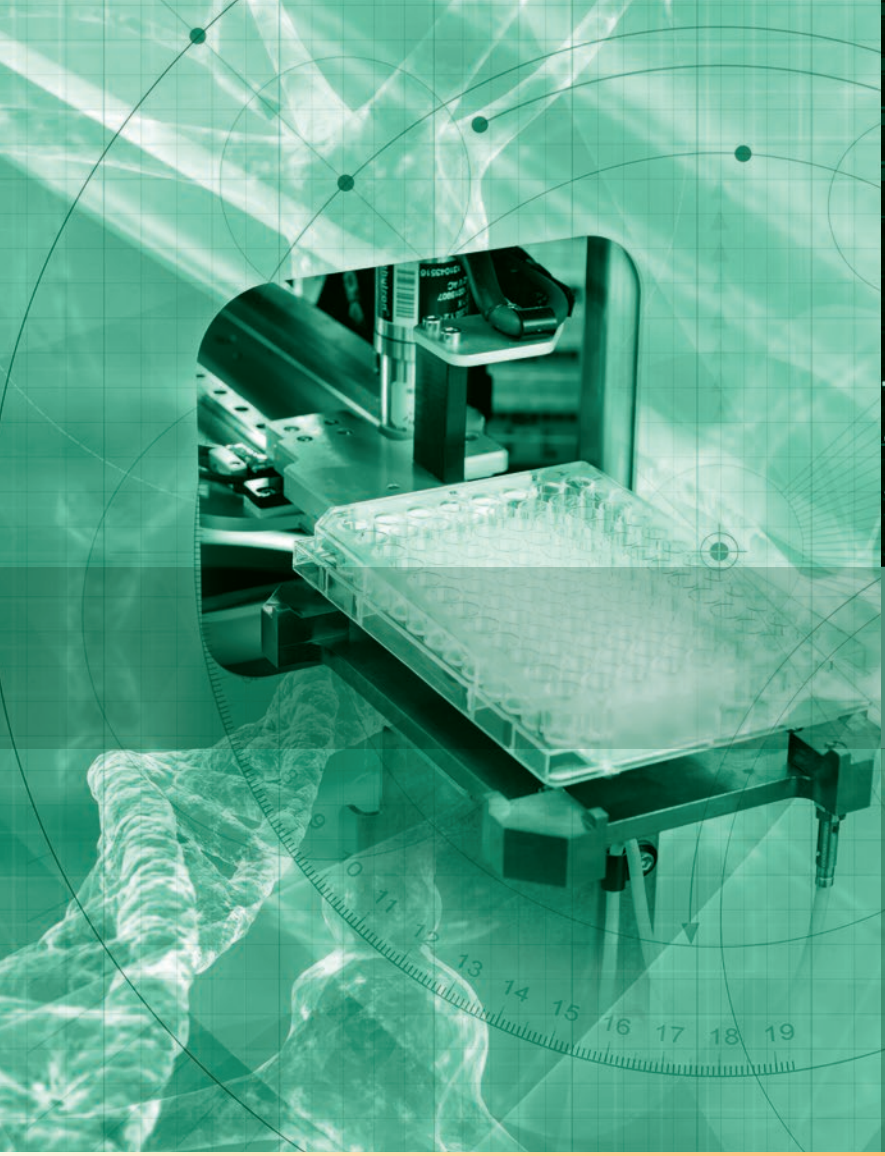


Thermo Scientific Cytomat Series
Automated Incubators and Storage Systems

dependable
sample protection

- Trusted reliability
- Worldwide support
- Environmental stability
- Innovative design

Thermo
SCIENTIFIC

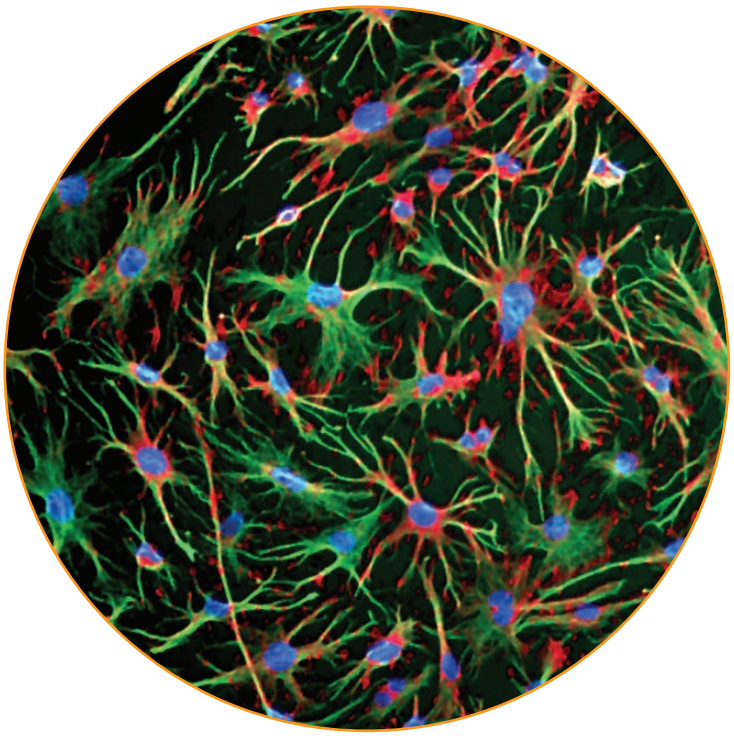
Thermo Scientific Cytomat Automated Incubators and

safeguarding your samples

When valuable assay samples are properly stored and accessed, research laboratories can achieve significant increase in productivity and efficiency.

Laboratory equipment manufacturers and researchers worldwide depend on highly reliable Thermo Scientific™ Cytomat™ automated incubators and microplate storage systems. With more than 40 years of experience in CO_2 incubator technology, the robot-accessible Cytomat series is the established leader in the field, offering:

- Broad range of automated incubators and storage modules
- Continuous operation with maximum sample and operator protection, conforming to:
  - CE, ROHS
  - DIN EN ISO/IEC 17025 (DKD/DAKKS certification) for laboratory temperature calibration
- Simple robotics teaching and programming for fast integration and start-up
- Superior conditions for all applications requiring precise environmental control
- Standard in Lab Automation (SiLA) interface packages



Intelligent Inventory Management and SiLA

The Thermo Scientific™ Cytomat™ systems are the first and only range of incubators that have SiLA compliance with internal database-driven inventory management and device grouping.

- Fast and easy integration (“Plug & Play”) with SiLA
- Secured internal inventory database (position, barcode, time stamp, etc.)
- Device-grouping for easy capacity ramp-up
- Simple and cost-effective upgrade of existing incubators

SiLA Rapid Integration®

Storage Systems

The Range

A wide variety of Cytomat systems are available with specific storage capacities, temperatures, dry storage, gassing options and various layout configuration options, supporting their use in multiple applications.

Cytomat 2

The Cytomat 2 series is the most compact system with a capacity for 42 standard microplates. This series offers several models with various temperature ranges and includes ambient storage (hotel). Space-saving under bench solutions are also available.

Cytomat Shaker

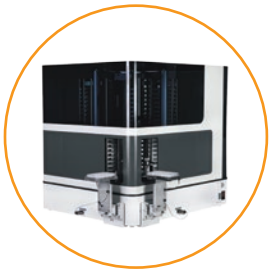
The Cytomat Shaker series with True Orbital Shaking is based on the Cytomat 2 and has a capacity of 32 standard microplates. The series is available with Tower Shaker or individual microplate Shaker Stacker and offers an ambient storage (hotel) and a wide temperature unit.

Cytomat 5

The Cytomat 5 series has a capacity for 105 standard microplates and is available as an incubator, wide temperature range unit and under-bench solution.

Cytomat 6000

The Cytomat 6000 series is mid-size, with a capacity for 189 standard microplates. It is available as ambient storage (hotel), an incubator, a wide temperature range unit and a dry storage version.



Cytomat 10

The Cytomat 10 series offers our most advanced incubator, wide temperature range and ambient storage (hotel) units, with a mean access time below 10 seconds and a capacity for 210 microplates. A fully automated decontamination routine, controlled humidity and superior temperature control ensure dependable sample protection. A glove-friendly, 7”- display with intuitive operation (NGD-display) and a remote monitoring application (CyMon) are also available.

Cytomat 24

The Cytomat 24 series is a floor-standing unit, with a capacity for 504 standard microplates. This series is available as an incubator, a wide temperature range unit, and a dry and ambient storage (hotel) unit. Storage capacity can be increased with the use of up to four Cytomat 24 units. These units can be daisy-chained and managed by one control box to reach a capacity of up to 2016 standard microplates.

Further customized solutions are available upon request.

trusted reliability

Worldwide Support

Thermo Scientific Cytomat service and support are backed up by our global network of Unity Lab Services™. Like all of our services, Cytomat support helps increase your productivity via increased uptime, reduced costs and optimized system performance.

Software Integration

Our experts will help your system operate seamlessly with any automated solution. We minimize and simplify robotic teaching and programming for fast implementation and start-up. Software commands are easy and intuitive.

Customized Solutions

Define the configuration of your robotic system or workstation through a choice of microplate, T-flask, or petri dish handling. A wide variety of temperature ranges and gassing environment options are available to provide the right atmosphere for different applications.

Whatever your Cytomat system configuration, your customized solution is certified to DIN EN ISO 9001 and supplied with full documentation, plus a quality test certificate similar to our standard Cytomat units. As an optional service, we also offer IQ and OQ validation.

Field Service

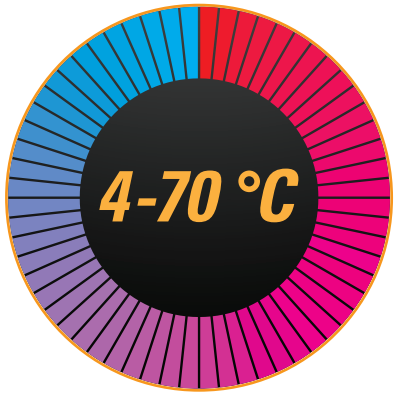
In addition to phone or email-based technical help, you can access experienced Field Service Specialists dedicated to the Cytomat systems. More than 100 trained Thermo Scientific Service Engineers are available to minimize the average repair time.

If Cytomat's standard solutions don't fit your requirements, our Engineering and R&D teams can design and develop customized products that meet the most demanding needs.

Storage Systems

Environmental Expertise

The Cytomat system accommodates all standard microplate formats, provides a choice of temperature (+4 to +70 °C) and humidity ranges, as well as gaseous atmospheres.



Cytomat incubators create ideal, stable environmental conditions for cell-based assays. Cooled storage systems ensure a dry climate, via inert gas, minimizing absorption of water by DMSO. In contrast, units are available that create hot and humid conditions to minimize evaporation for applications such as primer hybridization.

Advanced Cytomat designs promote superior environmental conditions and provide risk-free incubation, assay after assay.

high performance and ease-of-use

Innovative Design

With Cytomat, users get the industry's most advanced technology for automated storage and retrieval within a precisely-controlled environment.

The internally automated Plate Shuttle system optimizes microplate handling. It comprises a lift system, a handler for X/Y/Z movement axes, and a heated automatic access door. Plate access won't disturb inner chamber conditions as all Cytomat models are equipped with a small gate. Microplates enter and exit in seconds, significantly minimizing disruption of the controlled environment and providing dependable delivery times.

In addition, the sophisticated stacker (microplate storage) design is equipped with ventilation slots, allowing uniform temperature distribution across all plates.

Ease of Integration

The Cytomat system delivers the microplate to a single point, offering "easy-teach" integration for any automated system. A single loading and unloading point – the transfer station – makes teaching simple and cuts down the programming time, making an extremely robot-friendly design.

On system implementation, the robot needs to be taught only one position for plate pick-up.

Save significant time during installation and minute-to-minute operation with the Cytomat.

Storage Systems

The Right Options

Transfer Stations

Depending on the system integration, we offer various transfer station options for plate delivery. The standard transfer station presents microplates in portrait format. Other available options include: 90° turning for presentation in landscape format; a 180° turnable Swap Station; a linear transfer station with different lengths and vertical plate lift for under-bench units.

Stackers

The stainless steel, robust Cytomat Stacker accommodates all standard microplates. Dedicated pitch sizes are available to optimize capacity for different type of plates. They are easily removable for manual loading and unloading, and for validated decontamination processes, stackers can be autoclaved and dry heat sterilized at 180°C.

True Orbital Shaking

The true orbital Tower Shaker Stacker allows flexible individual settings for each stacker, from 100-1200 rpm. The active microplate clamping design secures both microplate and lid during shaking. Synchronized and unique dual magnetic drive systems are located in the top and bottom to provide consistent shaking amplitude across all microplates.The Shaker Stacker allows true orbital shaking of individual microplates.

Both options are only available for Cytomat Shaker.

Barcode Reader

The barcode reader is located on the plate handler, allowing retrieval of information on every position, even when manually loaded.

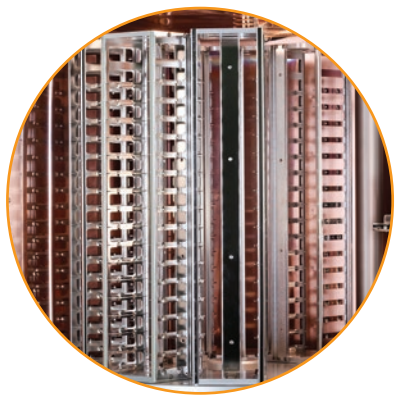
Copper Inner Chamber

The use of 100% pure copper as the chamber material minimizes contamination (introduced through door opening or sample handling) due to its inherent properties.

Various Gate Positions

Various gate positions provide flexibility for numerous layout and space requirements and restrictions.

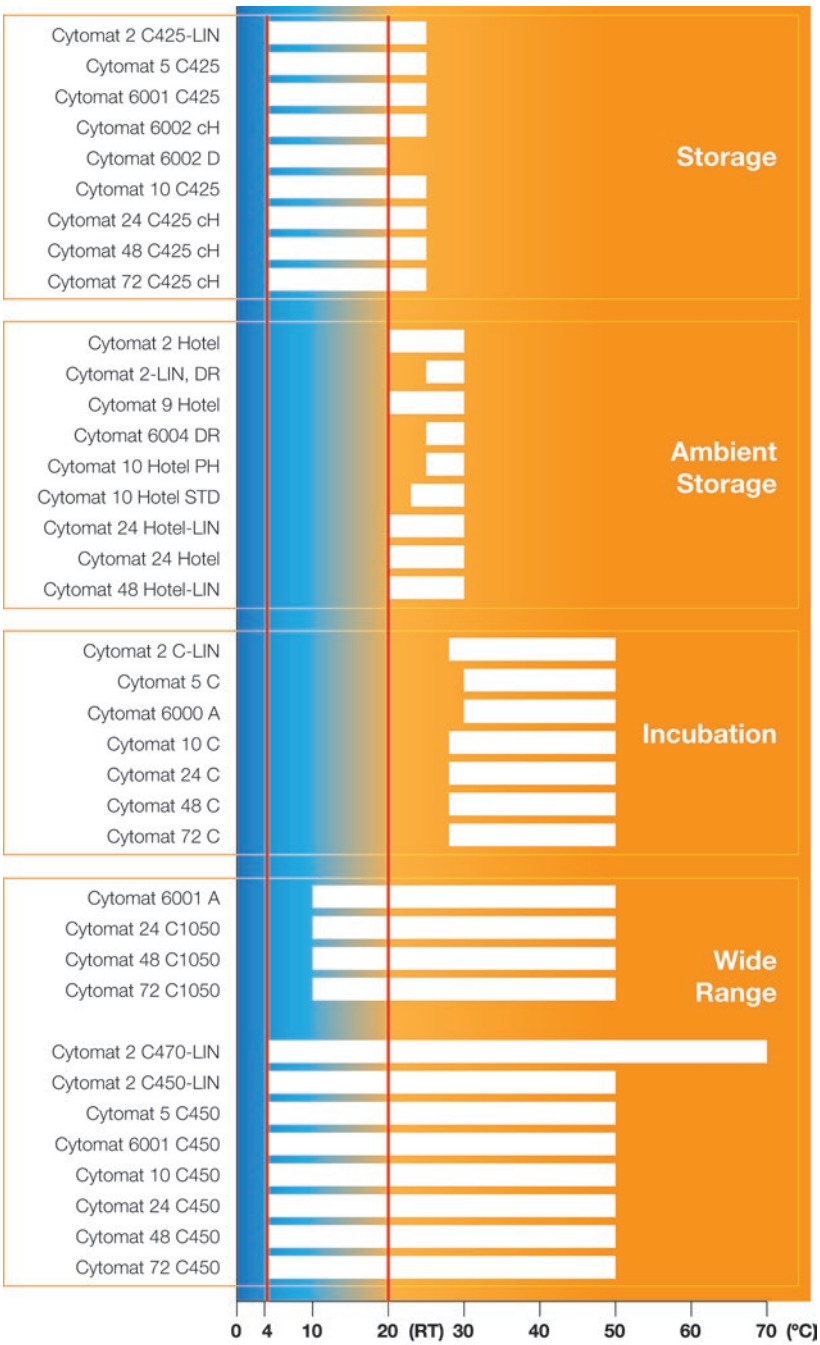
Further options such as hydrogen peroxide (H_2O_2) sterilization ports, O_2 control and high humidity are also available.



Thermo Scientific Cytomat
Automated Incubators and Storage Systems

Selecting the Right Cytomat

Choose from a wide range of Cytomat models to match your application requirements.



Model	No. Stackers	Capacity*
Cytomat 2	2	42
Cytomat 5	5	105
Cytomat 6000	9	189
Cytomat 10	10	210
Cytomat 24	24	504
Cytomat 48	48	1008
Cytomat 72	72	1512

** standard microplates with max. height of 18 mm*

Options	Description
O_2-control	O_2 control to regulate oxygen level with N_2 / O_2 supply
hH	High Humidity for up to 98% rel. Humidity @ 37 °C
FLC (H_2O_2)	H_2O_2 sterilization ports
Gate Position	Various gate positions depending on Cytomat model
DL	Door left hinged
TB	Tip Box

Accessories	Description
Stacker	Various stacker pitches for multiple microplate heights
BCR	Internal Bar Code Reader
Transfer Station	Numerous transfer station options
Plate lift	Vertical moving transfer station for Under Bench
ES	Enforced shovel

Further Options and Accessories on request.

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