

**Thermo Scientific
Cytomat® Automated Incubators
and Storage Modules**



**The only incubator and storage
systems that combine proven
reliability and environmental
stability with worldwide support.**

Our Cytomat support increases your productivity via higher uptime, reduced costs, and optimized systems performance.

Thermo Scientific
Cytomat 44
Automated Plate
Storage Module



Thermo Scientific
Cytomat 6000
Automatic Incubators

Accessing the Industry's Most Intensive Support

Thermo Scientific Cytomat service and support are backed up by the global network of Thermo Fisher Scientific, the world leader in serving science. Like all of our services, Cytomat support helps increase your productivity via higher uptime, reduced costs, and optimized systems performance.

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. Our in-house mechanical, software, and application experts work closely with our production and development facility to offer assistance around the globe. Whatever your concern, you get fast, dedicated local support virtually anywhere.

Software Integration

Our experts will help your system operate seamlessly with any automated assay solution. We minimize and simplify robotic teaching and programming for fast implementation and start-up. Software commands are easy and intuitive. And Cytomat's single loading and unloading point cuts down on robotic programming time and effort.

Customized Solutions

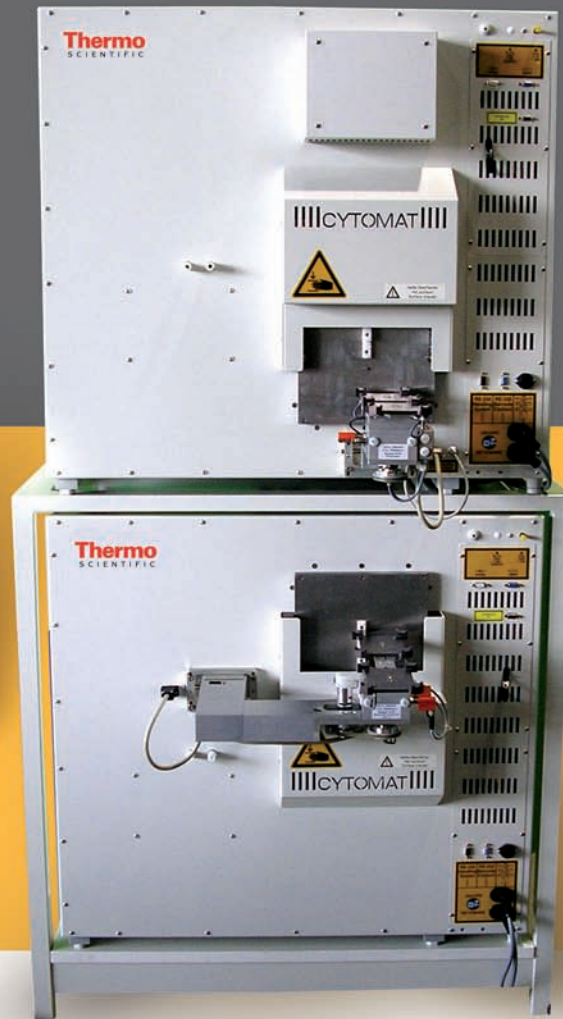
Define the configuration of your robotic system or workstation through a choice of microplate, T-flask, or Petri-dish handling, temperature, and humidity ranges, and gas environment options to provide the right atmosphere for different screening or sample storage applications. Whatever your Cytomat system configuration, we provide full documentation and certification of quality. As a service, we also offer IQ, OQ validation.

Field Service

In addition to phone or email-based technical help, you can access experienced field service specialists dedicated to Cytomat systems. More than 100 trained service engineers are available to minimize mean time to repair.



Thermo Scientific Cytomat Linear Hotel



Thermo Scientific Cytomat Hotel

Thermo Scientific Cytomat 600X System Stacked

Reaping the Benefits of Proven Reliability

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

That's why laboratory equipment manufacturers and researchers worldwide depend on highly reliable Thermo Scientific Cytomat automated incubators and microplate storage systems. The robot-accessible Cytomat line is the established leader in the field:

- Provides continuous operation and maximum sample protection
- Incorporates more than 40 years' experience in CO₂ incubator technology
- Offers the industry's broadest and deepest range of automated incubators and storage modules
- Integrates seamlessly with all automated assay systems
- Furnishes superior conditions for automated cell-based assays, cell cultures, bacterial assays, microarraying, compound libraries, and other applications requiring precise environmental control
- CE & CSA approval
- Operates laboratory for calibration of temperature according to EN ISO/IEC 17025 (DKD certification)

Relying On Trusted Environmental Expertise

The Cytomat system accommodates all standard microplate formats, and provides a choice of temperature (–20° C to 70° C) and humidity ranges, as well as gaseous atmospheres.

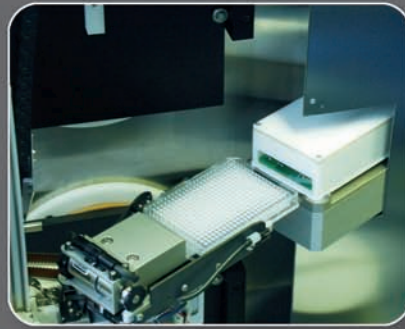
Cytomat incubators create ideal environmental conditions for cell-based assays. Cooled storage systems ensure an extremely dry climate with an inert atmosphere, minimizing DMSO water absorption. By contrast, primer hybridization systems create hot and humid conditions to minimize evaporation.

Both types emphasize reliable, stable environmental conditions for microplates. Results: reduced assay variance, excellent parameter uniformity, and virtual elimination of recovery times.

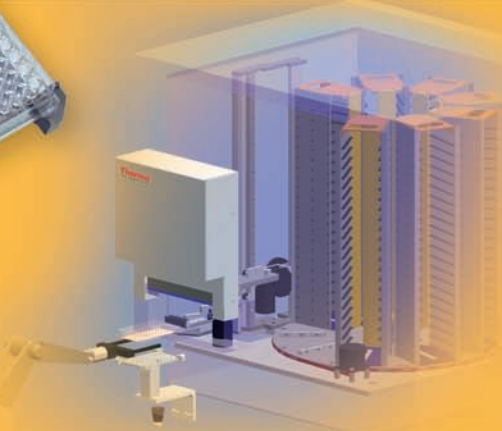
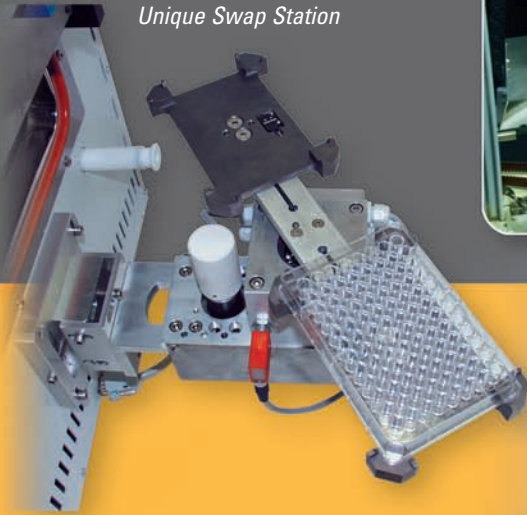
Superior Cytomat design and manufacturing quality provide incubation and storage with ISO 9001 quality certification.



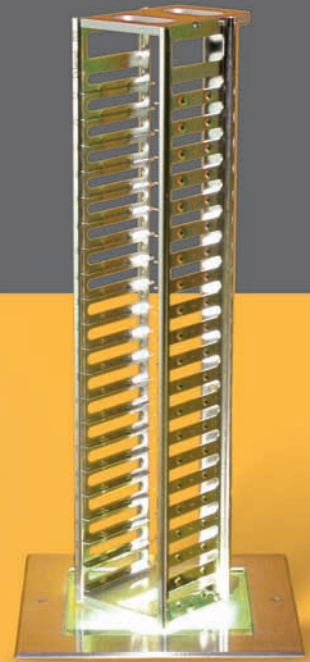
Wireless Barcode Reader



Unique Swap Station



Progressive Plate Shuttle System



Stacker

Taking Advantage of Our Innovative Design

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

Our internally automated **Thermo Scientific 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. Integration is a snap with any automated assay system. Capacity can reach from 40 to 1,008 shallow-well plates (capacity can vary depending on plate type). Random access of individual plates optimizes workflow. And easy-to-use, Windows®-based software allows onsite system reconfiguration and testing.

Ease of Integration

The Cytomat system delivers its microplates to a single point of integration — a transfer station, normally configured for portrait format — during unloading. It retrieves plates from the same point during loading.

This creates an extremely robot-friendly design. On system implementation, the robot needs to be taught only one position for plate pickup. You save significant time during both installation and minute-to-minute operation.

Choosing the Right Options Transfer Stations

The highly flexible Cytomat offers a variety of ways to present plates to the system. The standard Cytomat configuration features rear presentation. For top-of-counter presentation, a lifter is available. Other choices include 90° turning for presentation in landscape format, a 180° turntable Swap Station with two positions, and a Linear Transfer Station.

Stackers

The ultra-flexible Thermo Scientific Cytomat Stacker System accommodates all standard microplate formats (including deepwell plates) as well as tip boxes. Stackers are easily removed for manual loading and unloading, and can be autoclaved and sterilized with dry heat at 180° C.

Shaker

An orbital shaking option is ideal for applications requiring sample agitation, such as insect cell growth and gene expression. The software makes it easy to control the shaking commands and parameters.

Wireless Barcode Reader

All Cytomat models are available with a robotically controlled, wireless barcode reader that can scan barcodes at any plate position — inside and outside the controlled environment. This highly flexible inventory scanning capability allows information retrieval at any position, even when plates are manually loaded. This highly desirable feature minimizes plate movement and eliminates the process inefficiencies of fixed barcode scanners. With the wireless reader, Cytomat can provide data sets for sample and plate tracking, functioning as both databank and compound store.

CAPACITY

STORAGE

INCUBATION

HYBRIDIZATION

Standard Microplates

42

Selecting the Right Solution for Your Assay

Choose from a wide range of Cytomat models to match your laboratory mission and desired environmental conditions. It's easy to find precisely the right Cytomat, whatever your requirements.

189

504

924

1008

984

-80 ≈ -20

-10

0

4

10

20

T_A

(ambient)

37

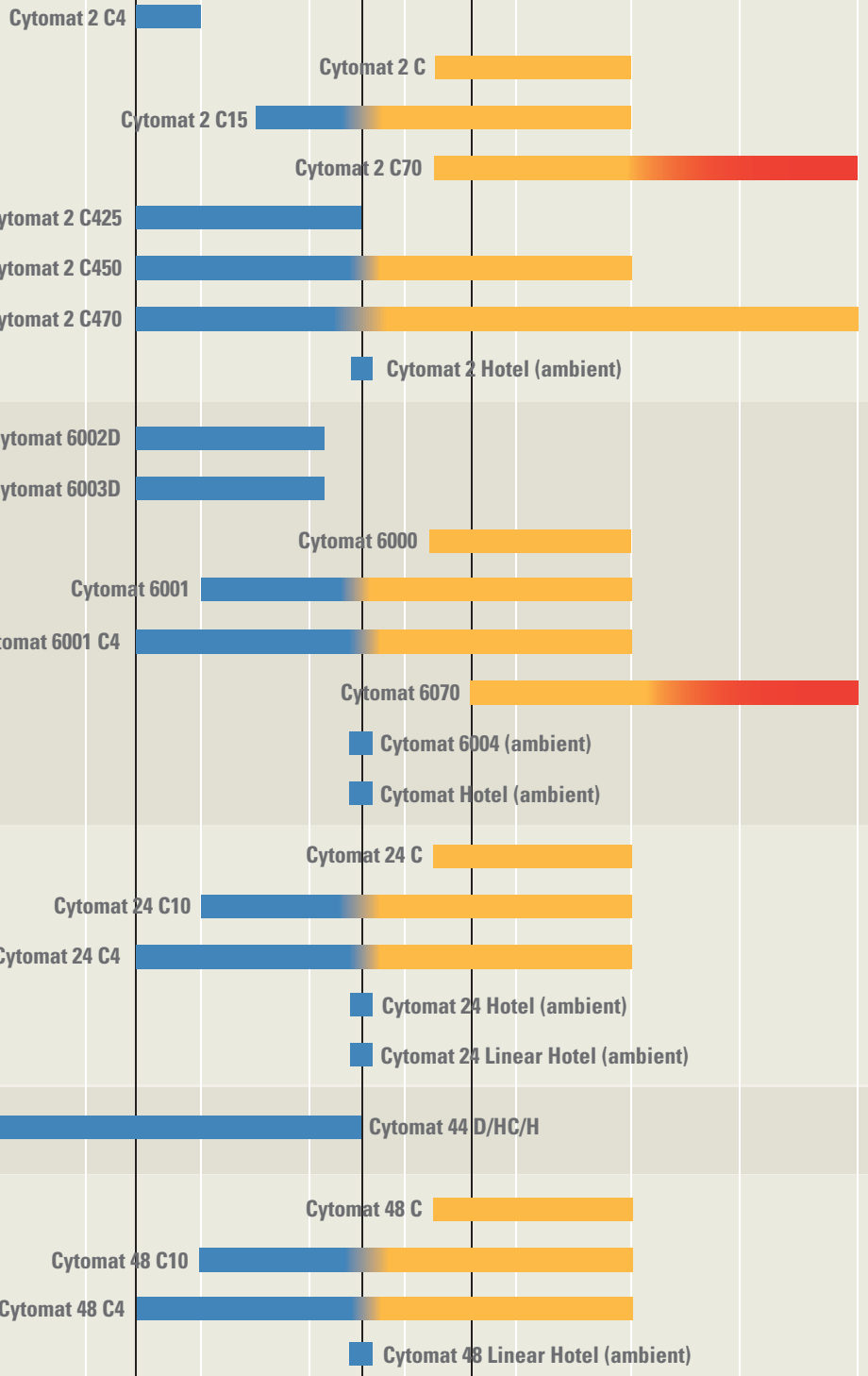
40

50

60

70

Temperature [°C]



Thermo Scientific Services

We are committed to helping your laboratory achieve success. Our solutions ensure that your automation systems are optimized for accuracy, productivity, and performance. We offer flexible solutions:

- Service agreements
- Preventative maintenance plans
- Software upgrades
- Software application support
- Technical support
- Integration services
- Relocation services
- Training

Contact a Thermo Fisher Scientific representative to tailor the service solution that best meets your needs.

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