

# Mid-range capacity, top of the range access and protection



## Thermo Scientific™ Cytomat™ 2 C-LiN automated incubators and storage devices

The next generation of advanced incubation and storage solutions for cell culture applications:

- Dependable sample protection
- Wide temperature range
- Super-fast access
- TRUE orbital shaking

# Incubation without compromise

**Scientists need to trust their incubator to provide the right environment for their cells. This includes maintaining consistent temperatures, humidity conditions, gas environments, and shaking patterns.**

Enter the Thermo Scientific™ Cytomat™ 2 C-LiN automated incubators and storage devices. Providing ideal solutions for mid-capacity incubation and storage, Cytomat 2 incubators combine superior environmental conditions with super-fast access and reliable sample protection.

- Wide temperature range available, from 4 °C to 70 °C
- Fully automated decontamination routine (ContraCon)
- Controlled humidity with external water tank
- Reliable, smooth and precise handling



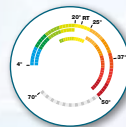
## Unrivaled Speed

The fastest incubators in their class, with a mean access time of 12 seconds. Individual speed settings per plate and adjustable incremental speed settings are available.



## Assured Decontamination

Thermo Scientific Cytomat 2 incubators have a fully automated ContraCon thermal decontamination routine, well established in tens of thousands of HeraCell and other Cytomat incubators throughout the world.



## Expanded Temperature Range

Incubators and storage solutions covering a range of temperatures from 4 °C to 70 °C, with the fastest access in their class.



## Easy Everyday Use

5" LED glove-friendly display with intuitive operation. Includes read-out messaging, warning alerts, and inventory data.



## Flexible Solution

Suitable for bench top and under bench, with multiple loading/unloading location options.

# Flexibility for all solutions

## Options and accessories

### Wide range of transfer stations



#### Standard transfer station

Supplies the microplate in portrait format. A 90° turnable version is also available for presentation in landscape format.



#### Swap station (180°)

180° turnable swap station to accelerate your handling process.



#### Linear transfer station

Available in different lengths (300, 400 and 500 mm) for extended reach. Delivers the microplate in portrait format, with further options for landscape presentation or lateral movement.



#### Plate lift for under-bench solution

Stepper motor driven (SMD) technology offers microplate movement to a predefined height within a 500 mm stroke.

### Options for your precise requirements



#### Precise Humidity Control

HydraSmart ultrasonic vaporizer technology for controlled humidity and an external water reservoir for maximum convenience and minimal contamination risk.



#### Solid Copper - Antimicrobial Material

Only solid pure antimicrobial copper chambers are proven to be effective against contamination.



#### TRUE Orbital Shaking Control

Produces ideal growth conditions for cells requiring consistent TRUE orbital shaking.

#### Further general options

- 1D Barcode reader
- P<sup>3</sup>-plate detection in stacker
- Various stacker pitch sizes for different plate heights
- Customized stackers for different labware
- HydraSmart plus: Humidity control ≤ 10% rH for dry environment

#### Specific options

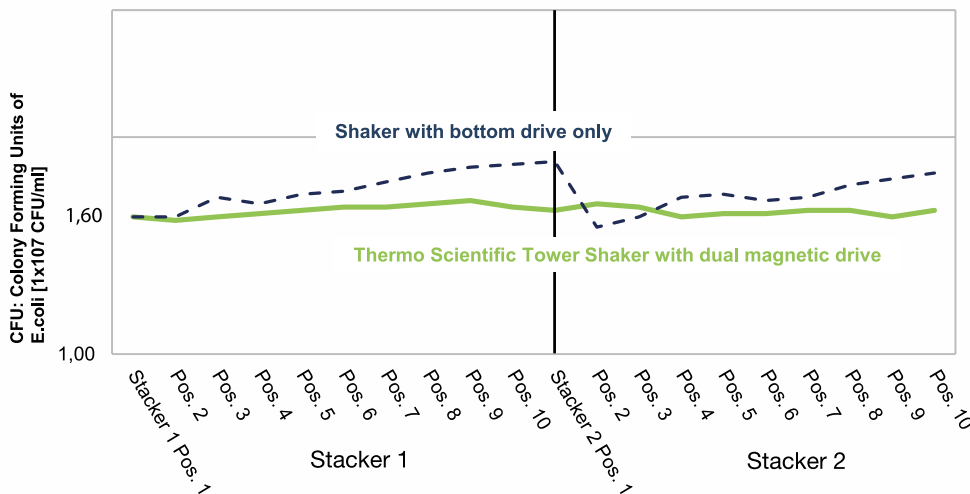
- O<sub>2</sub> control (1-21% or 5-90%)
- hH – high humidity up to 98% rH at 37 °C\*
- Door Left hinges (DL)
- H<sub>2</sub>O<sub>2</sub> disinfection ports (GDF)
- Air Purging System (APS) - CO<sub>2</sub> reduction during cell growth down to 1%

\* Condensate formation is possible

# True orbital shaking

The Thermo Scientific Cytomat 2 automated incubator with Tower Shaker is the only solution that provides true orbital shaking. It is ideal for applications requiring sample agitation and cells that need to be kept in suspension.

The synchronized dual magnetic drive system (located at the bottom and top) ensures consistent shaking amplitude across all microplates without being affected by load, position or number of plates.



## Key Applications

- Cell Culture (Mammalian)
- Microbial Culture
- Genomics
- Biologics
- Luminex (ELISA, Biomarkers)

## Markets

- Drug Discovery
- Biopharmaceuticals
- Life Science Research
- Diagnostics

## Bacterial growth consistency over the entire two stackers (bottom to top) of the Tower Shaking option

The graph shows optimum bacterial growth with the dual magnetic drive system across all plates (green line; standard deviation 2.7%). In comparison, the technology with only bottom drive shaking reveals inconsistent actual growth (standard deviation 10.1%).

## Tower shaker features

- Easy three step set-up:
  1. Install
  2. Secure (by lock screw to the ceiling)
  3. Plug in
- Active micoplate clamp mechanism secures plate and lid separately; no abrasions of the microplates during shaking
- Mix and match standard and Tower Shaker stacker for maximum flexibility for assay adoption
- Inductive wear-free driving mechanism allows for no particle emission or belts to change
- Superior shaking technology with individual speed settings of each Tower Shaker from 100-1200 rpm with oscillating amplitude of 2 mm (3 mm option available) offers a wide range of application setups

# One product series for every application

Developed by the inventors of microbiological incubators, and taking advantage of over two decades of unequalled automation experience, the Cytomat 2 automated incubator offers the broadest set of capabilities for incubation and storage. With minimal effort it delivers robust and consistent environmental conditions, the fastest access time in its class, and true orbital shaking.

The Cytomat 2 automated incubator is the solution for all applications - from random ambient, through low temperature and room incubation, to 37 °C incubation and hybridization, and beyond.

Model	Controlled temperature range	Low temperature storage	Ambient random access storage	Room temperature incubation	Biochemical assays	Cell Assays	Mammalian and microbial cell incubation	Short term incubation	Tower Shaker control
<b>Cytomat 2 C</b>	(Ambient + 10 °C) - 50 °C				◐	●	●	●	
<b>Cytomat 2 C425</b>	4 - 25 °C	●		●	●			●	●
<b>Cytomat 2 C450</b>	4 - 50 °C	●	●	●	●	●	●	●	●
<b>Cytomat 2 C470</b>	4 - 70 °C	●	●	●	●	●	●	●	●

◐ Capability  
● Good capability

## Shaking Options

(100-1200 rpm, orbital shaking with a max. load of 850 g per position)

Product		Part No.
Tower Shaker P23	16 microplate capacity, 1 mm amplitude (2 mm oscillation amplitude)	50107700
Tower Shaker P27	13 microplate capacity, 1 mm amplitude (2 mm oscillation amplitude)	50122160
Tower Shaker P50	7 microplate capacity, 1 mm amplitude (2 mm oscillation amplitude)	50118421
Tower Shaker P23, 3 mm	16 microplate capacity, 1.5 mm amplitude (3 mm oscillation amplitude)	50129388
Tower Shaker P27, 3 mm	13 microplate capacity, 1.5 mm amplitude (3 mm oscillation amplitude)	50138322
Tower Shaker P50, 3 mm	7 microplate capacity, 1.5 mm amplitude (3 mm oscillation amplitude)	50146206
Tower Shaker P33	11 microplate capacity, 1 mm amplitude (2 mm oscillation amplitude)	50127680
Tower Shaker P40	9 microplate capacity, 1 mm amplitude (2 mm oscillation amplitude)	50133660
Tower Shaker P60	6 microplate capacity, 1 mm amplitude (2 mm oscillation amplitude)	50126934



# Thermo Scientific Cytomat 2 automated incubators and storage devices

Discover your advanced incubation and storage solution today

Wide temperature ranges available

Mean access time below 12 seconds

Automated decontamination routine with ContraCon

Controlled humidity through HydraSmart technology

TRUE Orbital Shaking control



Find out more at [thermofisher.com/cytomat](https://thermofisher.com/cytomat)

**ThermoFisher**  
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